

Empa Activities 2018

Appendix

2	Awards
5	PhD Theses
26	Teaching Activities
34	Publications
34	Advanced Materials and Surfaces
47	Engineering Sciences
55	Materials meet Life
65	Mobility, Energy and Environment
78	Functional Materials
89	Corporate Services
90	Conferences
90	Advanced Materials and Surfaces
109	Engineering Sciences
115	Materials meet Life
131	Mobility, Energy and Environment
148	Functional Materials

[Search Content](#)

[Print](#)

Empa Activities 2018

Awards

Acoustics/Noise Control

Hannema Gwenael/Bergamini Andrea/Van Damme Bart/Zemp Armin

Best oral presentation. CADFEM, CADFEM ANSYS Simulation Conference held at EPF Lausanne

Advanced Analytical Technologies

Driesen Charlotte/Bogdal Christian/Nowack Bernd/Scheringer Martin/Hess Hans Dieter/Zenneg Markus

Award for the Best Poster Presentation. (Runner-up, Analytical Sciences). SCS Fall Meeting 2018 EPFL Lausanne. Sponsored by DSM | Bright Science. Brighter Living.

Munoz Fernandes Maria

Swiss Aerosol Award. Swiss Aerosol Group, Swiss Lung Foundation

Munoz Fernandes Maria

Trojan Horse Award. Ärztinnen und Ärzte für den Umweltschutz Schweiz, ETH Conference on Combustion Generated Nanoparticles

Schinkel Lena

DAS Young Scientist Travel Award. Swiss Chemical Society, Division of Analytical Sciences (DAS)

Schinkel Lena

Hutzinger Student Award. International Advisory Board of the DIOXIN Symposia

Schmitt Jean

Award best student oral presentation. 6th Nanosafe conference in Grenoble, FR (2018)

Tang Jiukai

Runner-up for the best student oral presentation. 6th Nanosafe conference in Grenoble, FR (2018)

Terreni Jasmin

Poster Prize, 15. Doktorandentag UZH. University Zürich

Advanced Fibers

Bülbül Ezgi

IUVSTA-Elsevier Student Award. 15th European Vacuum conference (EVC-15)

Air Pollution/Environmental Technology

Kantnerova Kristyna

Best Oral Presentation. University of Konstanz, DE

Kantnerova Kristyna

Best Oral Presentation. Swiss Chemical Society, Metrohm

Pieber Simone Maria

AAAR Professional Travel Award 2018. AAAR

Automotive Powertrain Technologies

Dimopoulos Eggenschwiler Panayotis

Outstanding Reviewer. Editorial board of International Journal of Multiphase Flow

Dimopoulos Eggenschwiler Panayotis

Outstanding Reviewer. Editorial Board of Applied Thermal Engineering

Dimopoulos Eggenschwiler Panayotis

Outstanding Reviewer. Editorial Board of Applied Energy

Dimopoulos Eggenschwiler Panayotis

Outstanding Reviewer. Editorial Board of Fuel

Dimopoulos Eggenschwiler Panayotis/Santoliquido Oscar/Bianchi Giovanni/Ortona Alberto

Cover of the december Issue. Editorial Board, International Journal of Applied Ceramic Technology

Papetti Viola/Dimopoulos Eggenschwiler Panayotis/Ortona Alberto

Finalist Best Poster Award. SCCER Board, SCCER Mobility Annual Conference

Biointerfaces

Gontsarik Mark

Best poster award. Biomaterials Science

Griffoni Chiara

Second prize for oral presentation. Empa PhDStudents' Symposium 2018

Ren Qun/Gut B./Hauser-Gerspach I./Kardas P./Stübinger S./Astasov-Frauenhoffer M.

Poster Award. Biofilm conference

Biomimetic Membranes and Textiles

Keirouz Antonios/Fortunato Giuseppino/Callanan Anthony/Radacsi Norbert

Best poster presentation. Electrospin2018 – 5th International Conference on Electrospinning. The Stellenbosch Institute for Advanced Study.

Cellulose & Wood Materials

Frey Marion

Heinzel Mondi Sappi Award 2018. Heinzel, Mondi, Sappi

Frey Marion

Award for Best Contribution: Presentation: "Densified functional cellulose materials – high performance materials based on the renewable resource wood." Congressi Stefano Franscini

**Cellulose & Wood
Materials**

Hausmann Michael
MaP Symposium Titel work: "Image competition 2nd price". ETH Zurich

Schwarze Francis
More than Classic Award 2018. More than Classic Foundation

Schwarze Francis/Ribera Regal Javier
Empa Innovation Award 2018. ETIF – Empa Technology & Innovation Forums

Vidiella del Blanco Marta
Macromolecular Journals Poster Prize. Macromolecular Journals (Wiley)

**Center for X-ray
Analytics**

Maurya Anjani
EXCITE Poster Award 2018. University Zürich & ETH, EXCITE summer school for Biomedical Imaging at ETH Zurich

Shakoorioskooie Mahdieh
Best poster. Ghent University, BE

**Concrete/Construction
Chemistry**

Colonna Daniele/Toropovs Nikolajs/Justs Janis/Wyrzykowski Mateusz/Leone Marianovella/Marchi Maurizio/Tortelli Sergio/Lura Pietro
1st Poster Award. International Workshop on Calcium sulfoaluminate cements Murten, Switzerland, June 4 – 6, 2018

Shi Zhenguo/Geng Guoqing/Leemann Andreas/Lothenbach Barbara
Best Poster Award. NUWCEM conference, 24–26. October 2018, Avignon, FR

Sirtoli Davide
PhD Student Award Edition 2018. SAIE of Bologna

**Electron Microscopy
Center**

Henninen Trond/Bon Marta/Passerone Daniele/Erni Rolf
2nd Prize Poster Presentation. Serbian Academy of Sciences and Arts, ELMINA2018, 1st International Conference on Electron Microscopy of Nanostructures

Keller Debora/Zhang Yucheng / Rossell Marta / Erni Rolf
Poster Prize. Royal Microscopy Society

Functional Polymers

Hany Roland
Best Contribution Award 2018. STAM

Jenatsch Sandra/F. Nüesch/B. Ruhstaller/Roland Hany
Professor René Wassermann Award 2018. EPF Lausanne

Quinsaat Jose Enrico/Dorina Opris/Heinrich Hofmann
Best oral presentation award. International Conference on Surfaces, Coatings and Nanostructured Materials (NAN-OSMAT)

Strassel Karen
Poster Award (Experts' choice). Empa PhDStudents' Symposium 2018

**High Performance
Ceramics
Materials for Energy
Conversion**

Naikade Manoj
Umicore Challenge Award 2018. University of Trento, IT, TOP STARS

Duchêne Léo/R.-S. Kühnel/E. Roedern/D. Rentsch/R. Moury/A. Remhof/H. Hagemann/C. Battaglia
Poster Award. Empa PhD Symposium, Dübendorf, 2018

Landmann Daniel
1st Place Expert's Choice Poster Presentation Award. Empa PhDStudents' Symposium 2018

Reber David
Breaking the wall of renewable energy storage, 1st place. Falling Wall Labs Zurich and qualification for global Falling Walls competition at International Congress

Reber David
Poster Award (Experts' choice). Empa PhDStudents' Symposium 2018

Reber David
MDPI Technologies Travel Award. 233rd ECS Meeting, Seattle, USA, 2018

Reber David/R.-S. Kühnel/C. Battaglia
1st Poster Prize. 5th International Symposium on Enhanced Electrochemical Capacitors, Jena, DE, 2017

Reber David/R.-S. Kühnel/C. Battaglia
Outstanding Student Poster Award. 233rd ECS Meeting, Seattle, USA, 2018

Reber David/R.-S. Kühnel/C. Battaglia
Poster Award. EPFL Energy Winter School, Crans Montana, 2018

**Mechanical Systems
Engineering**

Aiyangar Ameet
ISSLS Prize for Lumbar Spine Research in the category Bioengineering Science. The International Society for the Study of the Lumbar Spine (ISSLS)

**Nanoscale Materials
Science**

Mairena Anaïs/ M. Parschau/J. Seibel/L. Zoppi/C. Wäckerlin/J. Li/M. Wienke/A. Terfort/K. Martin/N. Avarvari/K.-H. Ernst
SAOG Posterprize. Swiss Working Group for Surfaces and Interfaces

NEST

Richner Peter/Largo Reto/Marchesi Enrico/Heer Philipp/Zimmermann Mark/Dransfeld Peter
Award für Marketing + Architektur; Kategorie Hotels, Restaurants, Bars, Touristikanlagen, Wellnessanlagen, Residenzen: NEST Unit Solare Fitness&Wellness. Award 2018 für Marketing und Architektur.

NEST

Richner Peter/Largo Reto/Marchesi Enrico/Heer Philipp/Zimmermann Mark/Dransfeld Peter
Norman Foster Solar Award für die NEST Unit Solare Fitness&Wellness. Solar Agentur.

Particles-Biology Interactions

Richner Peter/Largo Reto/Marchesi Enrico/Zimmermann Mark/Beerle Daniel/Gramazio Fabio/Kohler Matthias
"Umsicht Award", SIA

Herrmann Inge
Eccellenza Professorial Fellowship. Swiss National Science Foundation.

Hirsch Cordula
Best poster award. Nanotox

Structural Engineering

Matter Tino
SNI Award (Best Master Thesis in Nanoscience). Uni Basel

Ghafoori Elyas
3rdPlace Award, Photo Competition. IIFC International Institute for FRP in Construction Photo Competition / CICE 2018 in Paris, FR

Ghafoori Elyas
Certificate of Outstanding Contribution in Reviewing: "Thin-Walled Structures". The Editors of Thin-Walled Structures. Elsevier, Amsterdam, NL

Ghafoori Elyas
Certificate of Outstanding Contribution in Reviewing "Engineering Structures". The Editors of Engineering Structures. Elsevier, Amsterdam, NL

Ghafoori Elyas
Certificate of Outstanding Contribution in Reviewing "Construction and Building Materials". The Editors of Construction and Building Materials. Elsevier, Amsterdam, NL

Ghafoori Elyas/Hosseini Ardan/Pellissier Etienne/Hueppi Martin/Motavalli Masoud
The CICE 2018 Award for BEST PAPER for research on FRP Strengthening of Existing Structures. IIFC The International Institute for FRP in Construction/Prof. Scott Smit

Schranz Bernhard
Klaus Fischer Preis für beste Masterarbeit. Klaus Fischer Innovationspreis für Technik und Umwelt 2017. Universität für Bodenkultur Wien, AT, BOKU

Shahverdi Moslem
Certificate of Reviewing "Construction and Building Materials". The Editors of Construction and Building Materials Elsevier, Amsterdam, NL

Shahverdi Moslem
Certificate of Reviewing "Engineering Structures". The Editors of Engineering Structures. Elsevier, Amsterdam, NL

Shahverdi Moslem/Czaderski Christoph/Weber Benedikt/Motavalli Masoud/Julien Michels
World Innovation in Bridge Engineering Prize, Ranked: Population 3. BERDFEUP WIBEPRIZE World Innovation in Bridge Engineering 2017

Steiger René/Boccardo L./Zweidler S./Frangi A.
Outstanding Paper 2017 Award. Board of Editors of Materials and Structures and RILEM Community

Technology and Society

Hilty Lorenz/Bieser Jan (first author)
Best paper award. ICT4S 2018 organizing committee, Toronto, CA.

Hilty Lorenz/Pouri Maria
Best Paper Award. Gesellschaft für Informatik, Fachausschuss Umweltinformatik, 32nd EnviroInfo Conference, Garching, Munich, DE.

Turner David
Top Reviewer for Waste Management 2017. Elsevier

Thin Films and Photovoltaics

Avancini Enrico
Young Scientist Award. Spring meeting 2018, European Material Research Society

Carron Romain
Poster award. Spring meeting 2018, European Material Research Society

Feurer Thomas
Student award. European Photovoltaic Solar Energy Conference and Exhibition

Pisoni Stefano
3rd Place Oral Presentation Award. Empa PhDStudents' Symposium 2018

Wang Shutao
2018 Chemistry Travel Award. SCNAT and the Swiss Chemical Society

Transport at Nanoscale Interfaces

Synhaivska Olena/Mermoud Yves/Baghernejad Masoud/Gubicza Agnes/Alshanski Israel/Yitzchaik Shlomo/Wipf Mathias/Calame Michel
Poster Award 2nd Prize. Materials Center Leoben Forschung GmbH

Valzania Lorenzo
Best Student Paper Award. SPIE Photonics Europe 2018 Strasbourg, FR. Unconventional Optical Imaging conference

Urban Energy Systems

Bünning Felix
Student Travel Award. IBPSA

Empa Activities 2018

PhD Theses

Acoustics/Noise Control

Pieren Reto

Auralization of Environmental Noise using Sound Synthesis
Supervisor: Simons Dick G.
Co-Supervisor: Heutschi Kurt
Delft University of Technology, Aerospace Engineering, Delft, NL ◆

Schmied Jascha

Multi-Field Metamaterial Damping
Supervisor: Ermanni Paolo
Co-Supervisor: Bergamini Andrea
ETH Zurich, CMASLab ◆

Testoni Oleg

4D printed smart panels for morphing applications
Supervisor: Ermanni Paolo
Co-Supervisor: Bergamini Andrea
ETH Zurich, CMASLab ◆

Advanced Analytical Technologies

Arbelo Yunieski

XUV-Photoionization Mass Spectrometry (PIMS) for Microanalysis of Water-Oxidation Catalysts
Supervisor: Bleiner Davide
Co-Supervisor: Bleiner Davide
Uni Zürich, Chemistry ○

Barbato Francesco

In-line Phase Contrast Imaging of Laser-Driven Shock-Waves in Low Z Materials using Laser-Plasma Sources
Supervisor: Bleiner Davide
Co-Supervisor: Bleiner Davide
Uni Zürich, Chemistry ◆

Billeter Emanuel

Ultra-High Pressure Hydride X-ray Photoelectron Spectroscopy
Supervisor: Borgschulte Andreas
Co-Supervisor: Borgschulte Andreas
Uni Zürich, Dept. of Chemistry ◆

Drodova Sarka

VOC degradation by photocatalysts
Supervisor: Wang Jing
Co-Supervisor: Wang Jing
ETH Zurich, Institute of Environmental Engineering ◆

Hammer Tobias

Nanomaterial risks
Supervisor: Wang Jing
Co-Supervisor: Wang Jing
ETH Zurich, Institute of Environmental Engineering ◆

He Xu

Investigation of Various Engineered Nanoparticles: Environmental Remediation Applications and Transportation in the Environment after Disposal
Supervisor: Wang Jing
Co-Supervisor: Wang Jing
ETH Zurich, Institute of Environmental Engineering ○

Jiang Fuze

Novel fibrous materials for air quality
Supervisor: Wang Jing
Co-Supervisor: Wang Jing
ETH Zurich, Institute of Environmental Engineering ◆

Netkueakul Woranan

Risk assessment of graphene based materials
Supervisor: Wang Jing
Co-Supervisor: Wang Jing
ETH Zurich, Institute of Environmental Engineering ◆

Sachinidou Panagiota

Methodology for filtration of airborne particles down to single digit nanometer and polymer filter charge retention
Supervisor: Wang Jing
Co-Supervisor: Wang Jing
ETH Zurich, Institute of Environmental Engineering ○

Advanced Analytical Technologies

Sambalova Olga

Laser membrane photoemission on heterogeneous solar water splitting
Supervisor: Borgschulte Andreas
Co-Supervisor: Borgschulte Andreas
Uni Zürich, Dept. of Chemistry ◆

Schinkel Lena

New analytical methods for emerging chlorinated paraffins and transformation products
Supervisor: McNeill Christopher
Co-Supervisor: Heeb Norbert
ETH Zurich, Institute of Biogeochemistry and Pollutant Dynamics (IBP) ◆

Schmitt Jean

Engineering of 3D micro-structures for air quality
Supervisor: Wang Jing
Co-Supervisor: Wang Jing
ETH Zurich, Institute of Environmental Engineering ◆

Terreni Jasmin

Mimicking the natural CO₂ fixation and reduction reactions for Renewable Energy Storage
Supervisor: Borgschulte Andreas
Co-Supervisor: Borgschulte Andreas
Uni Zürich, Dept. of Chemistry ◆

Zhao Yibo

Functional fibrous materials
Supervisor: Wang Jing
Co-Supervisor: Wang Jing
ETH Zurich, Institute of Environmental Engineering ◆

Advanced Fibers

Bülbül Ezgi

Controlling Interactions at the Surface by the Structure below the Surface
Supervisor: Heuberger Manfred
Co-Supervisor: Hegemann Dirk
ETH Zurich, Dept. of Materials ◆

Chen Kang

Properties of industrial yarns
Supervisor: Zhang Yumei
Co-Supervisor: Perret Edith
EMPA St. Gallen, Donghua university, CN ◆

Jakubowski Konrad

Textile light conversion for flexible surfaces and wearable applications
Supervisor: Heuberger Manfred
Co-Supervisor: Hufenus Rudolf
ETH Zurich, Dept. of Materials ◆

Pan Dan

A new way to determining the radial temperature distribution of fiber during melt spinning
Supervisor: Chen Long
Co-Supervisor: Gooneie Ali
Donghua University, Dept. of Materials Science and Engineering, Shanghai, CN ◆

Selli Figen

Investigation of Different Types of Modified Polyester Fibers and Their Effects on Fabric Properties
Supervisor: Erdogan Halis
Co-Supervisor: Hufenus Rudolf
Dokuz Eylul University, Dept. of Textile Engineering, Izmir, TR ◆

Zhao Ruohan

TBD
Supervisor: Heuberger Manfred
Co-Supervisor: Gaan Sabyasachi
ETH Zurich, Materials Dept. ◆

Advanced Materials Processing

Berger Luisa

Coupling effects in artificial nano-dot lattices prepared by focused electron beam and atomic layer deposition (CANDLE)
Supervisor: Hoffmann Patrik
Co-Supervisor: Utke Ivo
Photonic Materials and Characterization , Photonic Materials and Characterization LPMAT

Cui Di

3D beam induced printing
Supervisor: Hoffmann Patrik
Co-Supervisor: Leparoux Marc
EPF Lausanne, Materials Science and Engineering ◆

Griffiths Seth

Additive Manufacturing of L12 Precipitate Strengthened Nickel and Aluminium Alloys
Supervisor: Hoffmann Patrik
Co-Supervisor: Leinenbach Christian
EPF Lausanne, Laboratory of Photonic Materials and Characterisation ◆

Infante Daniel

Combined refractive and diffractive microdevices
 Supervisor: Tscharf Toralf
 Co-Supervisor: Hoffmann Patrik
 EPF Lausanne, Optics and Photonics Technology Laboratory OPT ◆

Le Dantec Marie

Additive Fabrication of Silicon Pillars on Monocrystalline Silicon by Direct Laser Melting
 Supervisor: Hoffmann Patrik
 Co-Supervisor: Leparoux Marc
 EPF Lausanne, Photonic Materials and Characterization, Photonic Materials and Characterization, Photonic Materials and Characterization LPMAT ○

Li Xiaoshuang

Fabrication of metal-diamond composites by selective laser melting and their characterization
 Supervisor: Wegener Konrad
 Co-Supervisor: Leinenbach Christian
 ETH Zurich, Institute of Machine Tools and Manufacturing ◆

Lindström Viktor

Optimization of Au-based alloys for laser additive manufacturing
 Supervisor: Hoffmann Patrik
 Co-Supervisor: Leinenbach Christian
 EPF Lausanne, Photonic Materials and Characterization, Photonic Materials and Characterization LPMAT ◆

Markó Dominik

new precursors for focused electron beam induced deposition
 Supervisor: Hoffmann Patrik
 Co-Supervisor: Utke Ivo
 EPF Lausanne, Photonic Materials and Characterization, Photonic Materials and Characterization LPMAT ○

Vahdati Seyedpayam

Multiple overlapping pulsed laser materials processing
 Supervisor: Hoffmann Patrik
 Co-Supervisor: Hoffmann Patrik
 EPF Lausanne, Photonic Materials and Characterization, Photonic Materials and Characterization LPMAT ◆

Boleti Eirini

Statistical analysis of long-term air quality data in Switzerland
 Supervisor: Takahama Satoshi
 Co-Supervisor: Hueglin Christoph
 EPF Lausanne, School of Architecture, Civil and Environmental Engineering ◆

Graf Manuel

Balloon-borne mid-infrared laser spectroscopy for in-situ water vapor measurements in the Upper Troposphere and Lower Stratosphere
 Supervisor: Peter Thomas
 Co-Supervisor: Tuzson Béla
 ETH Zurich, Institut für Atmosphäre und Klima ◆

Ibraim Erkan

Development and field application of a laser spectroscopy based method for on-site analysis of N₂O isotopocules to constrain source processes of emissions
 Supervisor: Six Johan
 Co-Supervisor: Mohn Joachim
 ETH Zurich, Agricultural Sciences ○

Kantnerova Kristyna

Clumped isotopes as a novel tracer for the N₂O cycle
 Supervisor: Bernasconi Stefano
 Co-Supervisor: Mohn Joachim
 ETH Zurich, Geological Institute ◆

Katharopoulos Ioannis

Inverse modelling of halocarbon emissions in Europe
 Supervisor: Peter Thomas
 Co-Supervisor: Henne Stephan
 ETH Zurich, Atmospheric and Climate Science ◆

Morales Randolph

Inverse Modeling of CH₄ and its Isotopic Composition at European and Point Source Scales
 Supervisor: Peter Thomas
 Co-Supervisor: Brunner Dominik
 ETH Zurich, Institute for Atmospheric and Climate Science ◆

Mussetti Gianluca

Urban Climate and Air Quality modelling
 Supervisor: Carmeliet Jan
 Co-Supervisor: Brunner Dominik
 ETH Zurich, Building Physics ◆

Schwärzel Marc

High-resolution remote sensing and modelling of NO₂ at city scale
 Supervisor: Berne Alexis
 Co-Supervisor: Brunner Dominik
 EPF Lausanne, Environmental Remote Sensing Laboratory ◆

Automotive Powertrain Technologies

Gianetti Giovanni Gaetano

3D CFD Modeling of Combustion in a Natural Gas Engine for Light Commercial Vehicles
Supervisor: Onorati Angelo
Co-Supervisor: Soltic Patrik
Politecnico di Milano, IT, Dept. of Energy, Milano, IT ◆

Kammermann Thomas

Optical Diagnostics of Ignition and Early Flame Kernel Development in Hydrogen Enriched Methane Flames
Supervisor: Boulouchos Konstantinos
Co-Supervisor: Soltic Patrik
ETH Zurich, Laboratorium für Aerothermochemie und Verbrennungssysteme ◆

Omanovic Andyn

Optimization and Control of an Internal Combustion Engine with a Fully Flexible Variable Valvetrain
Supervisor: Onder Christopher
Co-Supervisor: Soltic Patrik
ETH Zurich, Institute for Dynamics System and Control (IDSC) ◆

Verri Isabella

Pore-Scale CFD Modeling of Tight Rocks
Supervisor: Onorati Angelo
Co-Supervisor: Della Torre Augusto
Politecnico di Milano, IT, Energy Dept., Milano, IT ○

Biointerfaces

Cihova Martina

Metallic biomaterial surface properties and their impact on biological response
Supervisor: Löffler Jörg
Co-Supervisor: Maniura Katharina

Gontsarik Mark

Tailoring antimicrobial peptides for bacteria membrane destruction
Supervisor: Yagmur Anan
Co-Supervisor: Salentinig Stefan
University of Copenhagen, Faculty of Health and Medical Sciences, Copenhagen / DK ◆

Griffoni Chiara

Advanced 3D skin model for the study and development of materials and drugs
Supervisor: Walles Heike
Co-Supervisor: Maniura Katharina
University of Würzburg, Biology, Würzburg, DE ◆

Huber Rebecca

Morphological gradients for protein adsorption and cell studies
Supervisor: Spencer Nicolas
Co-Supervisor: Maniura Katharina
ETH Zurich, Dept. of Materials ○

Mertgen Anne-Sophie

Decoration of polymer fibers with cell adhesive proteins/protein fragments for improved attachment of endothelial cells in blood propulsion systems
Supervisor: Vogel Viola
Co-Supervisor: Maniura Katharina Rottmar Markus
ETH Zurich, Dept. of Health Sciences and Technology ◆

Straub Hervé

TBD
Supervisor: Eberl Leo
Co-Supervisor: Ren Qun
Uni Zürich, Dept. of Plant and Microbial Biology ◆

Valentin Jules

TBD
Supervisor: van der Mei Henny
Co-Supervisor: Ren Qun
University of Groningen, Dep. of Biomedical Engineering, Groningen, NL ◆

Watts Samuel

TBD
Supervisor: Maniura Katharina
Co-Supervisor: Salentinig Stefan
ETH Zurich ◆

Weidenbacher Lukas

Development of a blood-compatible Membrane.
Supervisor: Ferguson Stephen
Co-Supervisor: Maniura Katharina Fortunato Giuseppino

Wiesli Matthias

Engineering of the immune Response of bone Substitute materials
Supervisor: Martin Ivan
Co-Supervisor: Maniura Katharina
Uni Basel, Biomedizin Basel ◆

Biointerfaces**Biomimetic Membranes
and Textiles****Zakeri Siavashani Abdollah**

Studies of silk for biomedical applications
Supervisor:
Co-Supervisor: Maniura Katharina
University of Tehran, IR ◆

Armagan Efe

TBD
Supervisor: Amstad Esther
Co-Supervisor: Toncelli Claudio
EPF Lausanne ◆

Clerc Michèle

TBD
Supervisor: Bruns Nico
Co-Supervisor: Boesel Luciano
University of Strathclyde, UK ◆

Fojtlin Milos

Assessment of car cabin thermal environments
Supervisor: Jicha Miroslav
Co-Supervisor: Psikuta Agnes
Brno University of Technology, Dept. of Thermodynamics and Environmental Engineering, Brno, CZ ◆

Fromme Nicolas

TBD
Supervisor: Riener Robert
Co-Supervisor: Camenzind Martin
ETH Zurich, Sensory-Motor Systems Lab ◆

Gursoy Akin

TBD
Supervisor: Bode Jeffrey W.
Co-Supervisor: Toncelli Claudio
ETH Zurich ◆

Huang Chieh-Szu

TBD
Supervisor: Kovalenko Maksym
Co-Supervisor: Boesel Luciano
ETH Zurich, Dept. of Chemistry ◆

Joshi Ankit

Moisture management in clothing microclimate
Supervisor: Bueno Marie-Ange
Co-Supervisor: Psikuta Agnes
ENSISA, LPMT, Mulhouse, FR ◆

Koelblen Barbara

Thermal human simulator as a tool for the evaluation of indoor environment conditions
Supervisor: Bogdan Anna
Co-Supervisor: Psikuta Agnes
Warsaw University of Technology, Air-Conditioning and Heating Dept., Warsaw, PL ○

Lüder Lars

Conductive metal-organic architectures for biochemical sensing
Supervisor: Rossi René
Co-Supervisor: Calame Michel

Luo Jialuo

(not decided so far)
Supervisor: Sorin Fabien
Co-Supervisor: Boesel Luciano
EPF Lausanne ◆

MacRae Braid

Human skin temperature: considerations for quantification by contact thermometry
Supervisor: Spengler Walder Christina
Co-Supervisor: Annaheim Simon
ETH Zurich, Dept. of Health Sciences and Technology ○

Morel Alexandre

Correlating structural and mechanical properties of electrospun single fibres and whole networks for tissue engineering applications
Supervisor: Ferguson Stephen
Co-Supervisor: Fortunato Giuseppino
ETH Zurich, Dept. of Health Sciences and Technology ◆

Prawiranto Kevin

TBD
Supervisor: Carmeliet Jan
Co-Supervisor: Defraeye Thijs
ETH Zurich, Dept. of Civil, Environmental and Geomatic Engineering ◆

Biomimetic Membranes and Textiles

Schoeller Jean

Tailored drug releasing pH responsive nanofibers for wound healing applications
Supervisor: Würtz-Kozak Karin
Co-Supervisor: Fortunato Giuseppino
ETH Zurich, Dept. of Health Sciences and Technology ◆

Sicher Alba

Structural colour in self-assembled soft photonic structures
Supervisor: Dufresne Eric
Co-Supervisor: Rossi René
ETH Zurich, ETH Zürich ◆

Tagliavini Giorgia

Convective Cooling of Heat-Sensitive Products: a Multiphysics Approach for Fruit Quality Prediction
Supervisor: Carmeliet Jan
Co-Supervisor: Defraeye Thijs
ETH Zurich, Dept. of Mechanical and Process Engineering ◆

Ulrich Sebastian

Photo- and magneto-switchable membranes
Supervisor: Bruns Nico
Co-Supervisor: Boesel Luciano
Uni Fribourg, Adolphe Merkle ◆

Weidenbacher Lukas

Development of a biomimetic surface for blood-contacting devices via electrospinning technologies
Supervisor: Ferguson Stephen
Co-Supervisor: Fortunato Giuseppino
ETH Zurich, Dept. of Health Sciences and Technology ○

Xu Jingxian

Study on thermal and moisture comfort prediction for clothing based on numerical thermoregulatory manikin
Supervisor: Li Jun
Co-Supervisor: Psikuta Agnes
Donghua University, College of Fashion and Design, Shanghai, CN ◆

Building Energy Materials and Components

Civioc Romain

Silica-carbon aerogels
Supervisor: Lattuada Marco
Co-Supervisor: Koebel Matthias
Uni Fribourg, Uni FR, Chemistry Dept. ◆

Guerrero Natalia

Urea based polyurea
Supervisor: Lattuada Marco
Co-Supervisor: Koebel Matthias
Uni Fribourg, Uni FR, Chemistry Dept. ◆

Sivaraman Deeptanshu

Biopolymer aerogels for thermal superinsulation
Supervisor: Lattuada Marco
Co-Supervisor: Malfait Wim
Uni Fribourg, Dept. of Chemistry ◆

Cellulose & Wood Materials

Arcari Mario

Cellulose nanofibrillar gels and aerogels relation between fibril structure and material functionality (prov. Title)
Supervisor: Mezzenga Raffaele
Co-Supervisor: Nyström Gustav
ETH Zurich, Dept. of Health Sciences and Technology ◆

Bachtiar Erik Valentin

Material characterization of wood, adhesives and coating of cultural heritage under various climatic conditions
Supervisor: Burgert Ingo
Co-Supervisor: Burgert Ingo
ETH Zurich, Institut für Baustoffe IfB ○

Boons Rani

Toolbox of functional bio-based inks: 3D printing of novel multiscale structured composites inspired by nature
Supervisor: Burgert Ingo
Co-Supervisor: Zimmermann Tanja
ETH Zurich, Institut für Baustoffe IfB ◆

Cao Jingming

THz-spectroscopy on wood
Supervisor: Burgert Ingo
Co-Supervisor: Rüggeberg Markus

Frey Marion

TBD
Supervisor: Burgert Ingo
Co-Supervisor: Burgert Ingo
ETH Zurich, Institut für Baustoffe ◆

Goldhahn Christian

Nano-Bio Modification of Wood and Wood-Based Materials for Novel Applications
Supervisor: Burgert Ingo
Co-Supervisor: Chanana Munish
ETH Zurich, Institut für Baustoffe ◆

Grönquist Philippe

Smart, innovative manufacturing of curved wooden components for architecture with complex geometry
Supervisor: Burgert Ingo
Co-Supervisor: Rüggeberg Markus
ETH Zürich, Institut für Baustoffe IfB ◆

Han Liuyang

TBD
Supervisor: Burgert Ingo
Co-Supervisor: Burgert Ingo
Chinese Academy of Forestry, China Scholarship Council, Beijing, China ◆

Hausmann Michael

Hierarchically structured cellulose-based Composites
Supervisor: Studart André
Co-Supervisor: De Freitas Siqueira Gilberto
ETH Zurich, Institut für Baustoffe IfB ◆

Kostic Sanja

Development of a novel adhesion system between wood timber and concrete
Supervisor: Burgert Ingo
Co-Supervisor: Cabanne Etienne
ETH Zurich, Institut für Baustoffe IfB ○

Lämmlein Sarah

Microstructure-property relationship in varnished wood of string instruments
Supervisor: Burgert Ingo
Co-Supervisor: Schwarze Francis
ETH Zürich, Institut für Baustoffe IfB ◆

Müller Luca

Toolbox of functional bio-based inks: 3D printing of novel multiscale structured composites inspired by nature
Supervisor: Burgert Ingo
Co-Supervisor: Zimmermann Tanja
ETH Zurich, Institut für Baustoffe IfB ◆

Oluyinka Olaniran Samuel

Mechanical characterization of modified woods
Supervisor: Burgert Ingo
Co-Supervisor: Rüggeberg Markus
ETH Zürich, Institut für Baustoffe IfB ◆

Özparpucu Merve

Mechanical and structural characterization of modified poplar wood
Supervisor: Burgert Ingo
Co-Supervisor: Burgert Ingo
ETH Zurich, Institut für Baustoffe IfB ○

Pasqualini Alessia

Biological control of interior decay in wood products by Trichoderma species
Supervisor: Schwarze Francis
Co-Supervisor: Schwarze Francis
Albert-Ludwigs-Universität Freiburg, DE ◆

Sun Jianguo

Wood based materials from mechanical energy conversion
Supervisor: Burgert Ingo
Co-Supervisor: Guo Huizhang
ETH Zurich, Institut für Baustoffe IfB ◆

Tu Kunkun

Functionalization of wood materials for carbon dioxide capture and fire resistance (prov. Title)
Supervisor: Burgert Ingo
Co-Supervisor: Burgert Ingo
ETH Zurich, Institut für Baustoffe IfB ◆

Uselli Mattia

Fibrillar colloidal gels studied by dynamic scattering techniques
Supervisor: Mezzenga Raffaele
Co-Supervisor: Nyström Gustav
ETH Zurich, Dept. of Health Sciences and Technology ◆

Vailati Chiara

Convertible wood structures for architecture
Supervisor: Burgert Ingo
Co-Supervisor: Rüggeberg Markus
ETH Zurich, Institut für Baustoffe IfB ○

**Cellulose & Wood
Materials**

Vidiella del Blanco Marta Esther

Functionalization of wood materials for smart filters in oil-water separation technology
Supervisor: Burgert Ingo
Co-Supervisor: Cabane Etienne
ETH Zurich, Institut für Baustoffe IfB ○

Vitas Selin

Functionalization of wood materials for innovative application in filter technology
Supervisor: Burgert Ingo
Co-Supervisor: Cabane Etienne
ETH Zürich, Institut für Baustoffe IfB ◆

Wang Yaru

Wood modification by sol-gel derived inorganic nanoparticles
Supervisor: Burgert Ingo
Co-Supervisor: Cabane Etienne
ETH Zürich, Institut für Baustoffe IfB ◆

**Center for X-ray
Analytics**

Dolabella Simone

Novel monolithic Si NEMS:
Study and correlation of structural and physical behaviour
Supervisor: Leblebici Yusuf
Co-Supervisor: Neels Antonia
EPF Lausanne, EDM1 ◆

Iranpour Neda

Nano-X: Synthesis and dynamical in-situ X-ray diffraction and scattering studies on advanced fiber systems and functional crystalline matter
Supervisor: Neels Antonia
Co-Supervisor: Wick Peter
Uni Fribourg, Uni FR ◆

Maurya Anjani

Microfluidics synthesis of nanoparticle-fiber systems and in-situ structural monitoring of their nucleation and growth
Supervisor: Dommann Alex
Co-Supervisor: Neels Antonia
Uni Bern ◆

Shakoorioskooie Mahdieh

TBD
Supervisor: Lura Pietro
Co-Supervisor: Zboray Robert
ETH Zurich, Building Materials ◆

**Concrete/Construction
Chemistry**

Barzgar Sonya

CASHII: complexation
Supervisor: Ludwig Christian
Co-Supervisor: Lothenbach Barbara
EPF Lausanne, School of Architecture, Civil and Environmental Engineering ENAC ◆

German Alexander

Hydration and properties of low-CO2 cements based on magnesium hydroxycarbonates
Supervisor: Lura Pietro
Co-Supervisor: Winnefeld Frank
ETH Zurich, Institut für Baustoffe ◆

Ghourchian Sadegh

Plastic shrinkage cracking in concrete: from mechanisms to mitigation strategies
Supervisor: Lura Pietro
Co-Supervisor: Wyrzykowski Mateusz
ETH Zurich, Institut für Baustoffe ○

Manzini Andrea

Thermodynamic and spectroscopic investigations of the Fe and S speciation under reducing conditions
Supervisor: Wehrli Bernhard
Co-Supervisor: Lothenbach Barbara
ETH Zurich, Umweltwissenschaften ◆

Nedyalkova Latina

A Structural and Thermodynamic Study of the Intercalation of Selenium(-IV), Selenium(-II), Sulfur(-II) and Iodine(-I) in Hydrocalumites (AFm-phases)
Supervisor: Mäder Urs
Co-Supervisor: Lothenbach Barbara
Uni Bern, Geology ◆

Shakoori Oskooie Mahdieh

Mechanism of Alkali-Silicate damage evolution in concrete
Supervisor: Lura Pietro
Co-Supervisor: Griffa Michele
ETH Zurich, Institute for Building Materials, Dept. of Civil, Environmental and Geomatic Engineering ◆

Concrete/Construction Chemistry

Stöckli Anne-Christin

Linear and nonlinear ultrasounds methods for non-destructive and systematic characterization of concrete durability properties

Supervisor: Lura Pietro

Co-Supervisor: Griffa Michele

ETH Zurich, Institute for Building Materials, Dept. of Civil, Environmental and Geomatic Engineering ◆

Yan Yiru

CASHII: soild phases

Supervisor: Scrivener Karen

Co-Supervisor: Lothenbach Barbara

EPF Lausanne, LMC ◆

Electron Microscopy Center

Bologna Nicolas

TBD

Supervisor: Fontcuberta Anna

Co-Supervisor: Rossell Marta D.

EPF Lausanne, Laboratory of Semiconductor Materials ◆

Kozak Roksolana

Integration of GaAs on Si Nanostructures: Investigation of Growth, Defects, and Interfaces

Supervisor: Bona Gian-Luca

Co-Supervisor: Rossell Marta D.

ETH Zurich, Dept. of Information Technology and Electrical Engineering ○

Vogel Alexander

TBD

Supervisor: Fiebig Manfred

Co-Supervisor: Rossell Marta D.

ETH Zurich, Dept. of Materials ◆

Experimental Continuum Mechanics

Chen Zhen

The effect of R ratio and temperature on fatigue crack growth threshold of power plant steels

Supervisor: Mazza Edoardo

Co-Supervisor: Holdsworth Stuart

ETH Zurich, Institute for Mechanical Systems ○

Domaschke Sebastian

Mechanical Interactions in fibrous networks

Supervisor: Mazza Edoardo

Co-Supervisor: Ehret Alexander

ETH Zürich, Institute for Mechanical Systems ◆

GhGhanbari Pooriya

Modelling of process and mechanical integrity of direct laser deposited (DLD) Ti-based bi-metal builds

Supervisor: Mazza Edoardo

Co-Supervisor: Hosseini Ehsan

ETH Zurich, Institute for Mechanical Systems ◆

Kuravi Ramachandra

Meso-scale analysis and modelling of soft musculoskeletal tissues

Supervisor: Mazza Edoardo

Co-Supervisor: Ehret Alexander

ETH Zurich, Institute for Mechanical Systems ◆

Li Xiaolong

Physical-microstructurally based modelling of primary creep persistency

Supervisor: Mazza Edoardo

Co-Supervisor: Hosseini Ehsan

ETH Zurich, Institute for Mechanical Systems ◆

Schillai Kilian

Enhanced fretting fatigue resistance of conductors for high voltage overhead lines

Supervisor: Mazza Edoardo

Co-Supervisor: Holdsworth Stuart

ETH Zurich, Institute for Mechanical Systems ○

Functional Polymers

Abdolhosseinzadeh Sina

Inorganic Inks for high-precision printing of TFTs

Supervisor: Nüesch Frank

Co-Supervisor: Heier Jakob

EPF Lausanne ◆

Anantharaman Surendra Babu

Self-assembly of cyanine dye molecules into J-aggregates on surfaces for applications in opto-electronic devices

Supervisor: Nüesch Frank

Co-Supervisor: Heier Jakob

EPF Lausanne, Chemistry or Polymer Chemistry ◆

Caspari Philip

High permittivity siloxanes in the application of dielectric elastomer generators

Supervisor: Nüesch Frank

Co-Supervisor: Opris Dorina

EPF Lausanne, Chemistry or Polymer Chemistry ◆

Diethelm Matthias

Transient Phenomena in Salt Semiconductor Devices
 Supervisor: Nüesch Frank
 Co-Supervisor: Hany Roland
 EPF Lausanne ◆

Dünki Simon

Silicones with enhanced permittivity for dielectric elastomer actuators
 Supervisor: Prof. Nüesch Frank
 Co-Supervisor: Opris Dorina
 EPF Lausanne, Chemistry or Polymer Chemistry ○

Gesevicius Donatas

Morphology control by ionic interactions of cyanine/PCBM bulk heterojunctions for photovoltaic applications
 Supervisor: Nüesch Frank
 Co-Supervisor: Heier Jakob
 EPF Lausanne, Chemistry or Polymer Chemistry ○

Jenatsch Sandra

Dynamics of Electronic and Ionic Charges in Cyanine Organic Semiconductor Devices
 Supervisor: Prof. Nüesch Frank
 Co-Supervisor: Hany Roland
 EPF Lausanne, Chemistry or Polymer Chemistry ○

Ko Yee Song

Smart materials for artificial muscle and energy harvesting
 Supervisor: Prof. Nüesch Frank
 Co-Supervisor: Opris Dorina
 EPF Lausanne, Chemistry or Polymer Chemistry ○

Leclaire Nicolas

Spatial and morphological growth control of cyanine dye crystals
 Supervisor: Nüesch Frank
 Co-Supervisor: Heier Jakob
 EPF Lausanne, Materials Science and Engineering ○

Sheima Yauhen

Novel silicones for artificial muscles: from synthesis to applications
 Supervisor: Frauenrath Holger
 Co-Supervisor: Opris Dorina
 EPF Lausanne ◆

Strassel Karen

all-organic optical upconversion device for single-element near-infrared imaging
 Supervisor: Nüesch Frank
 Co-Supervisor: Hany Roland
 EPF Lausanne ◆

Domogala Kamila

TBD
 Supervisor: Kata Darius
 Co-Supervisor: Graule Thomas
 AGH University of Science and Technology, Cracow, PL ◆

Hadian Amir

Synthesis and characterization of NbC – Fe based cemented carbide
 Supervisor: Zamani Cyrus
 Co-Supervisor: Clemens Frank
 University of Tehran, College of Engineering, Tehran, IR ◆

Hedayati Mehdi

Fabrication of PVDF/BaTiO₃/Al@Al₂O₃ Nanocomposite and Investigation of its Dielectric Behavior and Electrical Energy Storage
 Supervisor: Nasaj Ehsan Taheri
 Co-Supervisor: Clemens Frank
 Tarbiat Modares University of Tehran, College of Engineering, Tehran, IR ◆

Naikade Manoj

SIMEA: Study and characterization of silicon metal alloys systems for the reactive infiltration process of ceramic matrix composites -SNSF grant number: 200021_163017
 Supervisor: Weber Ludger
 Co-Supervisor: Graule Thomas
 EPF Lausanne, Laboratoire de Métallurgie Mécanique ◆

Ozog Paulina

KTI Projekt: Herstellung hochwertiger Aluminiumnitrid-basierter Keramiken aus verbrennungsbasierter Direkt-synthese von nanoskaligen AlN-Pulvern - ALUMNI
 Supervisor: Kata Darius
 Co-Supervisor: Graule Thomas
 AGH University of Science and Technology, Cracow, PL ◆

Pfeiffer Stefan

Selective Laser Melting of oxide based ceramics
 Supervisor: Aneziris Christos G.
 Co-Supervisor: Graule Thomas
 TU Freiberg, DE, TU Bergakademie Freiberg, Freiberg, DE ◆

**High Performance
Ceramics**

**Joining Technologies
and Corrosion**

**Materials for Energy
Conversion**

**Mechanical Systems
Engineering**

Top Jens

Molecular and physical aspects of dye sensitization of photoelectrodes with copper-based sensitizer molecules
SNF Verfügung: IZKSZ2_162232
Supervisor: Housecroft Catherine E.
Co-Supervisor: Braun Artur
Uni Basel, Dept. Chemistry ◆

Cihova Martina

TBD
Supervisor: Löffler Jörg
Co-Supervisor: Schmutz Patrik
ETH Zurich, Institut für Metallforschung ◆

Dörner Lars

Highly-energetic Al/CuO thermite coatings through nanoparticle Composites
Supervisor: Kovalenko Maksym
Co-Supervisor: Jeurgens Lars P.H.
ETH Zurich, Laboratorium für Anorganische Chemie (LAC) ◆

Druzhinin Aleksandr

TBD
Supervisor: Straumal Boris
Co-Supervisor: Janczak-Rusch Jolanta
National University of Science & Technology MISIS, Dept. of Material Science of Semiconductors & Dielectrics Nusst MISIS ◆

Ilic Emilija

Predicting deterioration phenomena at coating/implant interfaces in vivo
Supervisor: Mischler Stefano
Co-Supervisor: Hauert Roland
EPF Lausanne, Institut des Matériaux IMX, Lausanne ◆

Philipp Natzke

TBD
Supervisor: Grossner Ulrike
Co-Supervisor: Janczak-Rusch Jolanta
ETH Zurich, APS ◆

Ruohan Zhao

TBD
Supervisor: Heuberger Manfred
Co-Supervisor: Schmutz/Sabyasachi Patrik/Gaan
ETH Zurich, Dept. of Materials ◆

Asakura Ryo

TBD
Supervisor: Hagemann Hans
Co-Supervisor: Remhof Arndt
Uni Genf, Dept. of Physical Chemistry ◆

Bay Marie-Claude

β"-alumina electrolytes for enhanced electrical and mechanical performance of sodium nickel chloride batteries
Supervisor: Vogt Ulrich
Co-Supervisor: Vogt Ulrich
Albert-Ludwigs-Universität Freiburg, Institute of Crystallography, Freiburg im Breisgau, DE ◆

Duchêne Léo

TBD
Supervisor: Hagemann Hans
Co-Supervisor: Remhof Arndt
Uni Genf, Dept. of Physical Chemistry ◆

Landmann Daniel

TBD
Supervisor: Haussener Sophia
Co-Supervisor: Battaglia Corsin
EPF Lausanne, Dept. of Genius Mechanique ◆

Pagani Francesco

TBD
Supervisor: Rupp Jennifer
Co-Supervisor: Battaglia Corsin
ETH Zürich, Dept. of Materials ◆

Reber David

TBD
Supervisor: Nüesch Frank
Co-Supervisor: Battaglia Corsin
EPF Lausanne, Materials Science and Engineering ◆

Byrne Ryan

Combining multi-body modeling with finite element modeling to study the mechanics of lumbar motion during dynamic functional tasks
Supervisor: Zhang Xudong
Co-Supervisor: Aiyangar Ameet
University of Pittsburgh, Mechanical Engineering & Materials Science, Pittsburgh, USA ◆

◆ in progress

○ submitted in 2018

PhD Theses 2018

15

Mechanical Systems Engineering

Chakraborty Souvik

Systematic investigation of the interface and load transfer in carbon (nanoparticle) based epoxy composites
Supervisor: Chakraborty Amit K.
Co-Supervisor: Barbezat Michel
NITD, Dept. of Physics, Durgapur, IN ○

Cornaz Frédéric Jean-Pierre

Intraoperative tissue analysis using radio frequency plasma spectroscopy
Supervisor: Meyer Dominik
Co-Supervisor: Valet/Weisse Sebastian / Bernhard
Uni Zürich, Medizinische Fakultät ◆

Lämmlein Tobias

Bond of HM-CFRP tendons in HPC beams
Supervisor: Lura Pietro
Co-Supervisor: Terrasi Giovanni
ETH Zürich, Institute for Building Materials - Dept. of Civil, Environmental and Geomatic Engineering ◆

Lenzenweger Rupert

Nanostructured hierarchical CFRP surfaces for tailored visual appearance and improved durability
Supervisor: Pinter Gerald
Co-Supervisor: Brunner Andreas J.
Montan Universität, Leoben, AT, Chair of Materials Science and Testing of Polymers, Leoben, AT ◆

Stankovic Danjela

Fretting fatigue of CFRP loops on CFRP pins
Supervisor: Bisby Luke
Co-Supervisor: Terrasi Giovanni
University of Edinburgh, Institute for Infrastructure and Environment, Edinburgh, UK ◆

Mechanics of Materials and Nanostructures

Berger Luisa

Coupling effects in artificial nano-dot lattices prepared by focused electron beam and atomic layer deposition (CANDLE)
Supervisor: Utke Ivo
Co-Supervisor: Hoffmann Patrik
EPF Lausanne, Materials Science Dept. ◆

Bertero Enrico

Electrodeposition of stainless steel micro-components in UV-LIGA moulds
Supervisor: Mischler Stefano
Co-Supervisor: Michler Johann
EPF Lausanne, Tribology and Interfacial Chemistry Group TIC ◆

Casari Daniele

Micromechanical Properties of Bone
Supervisor: Zysset Philippe
Co-Supervisor: Schwiedrzik Jakob
Uni Bern, Institute of Surgical Technology and Biomechanics ◆

della Ventura Nicolò Maria

Mechanisms of deformation twinning in hcp metals
Supervisor: Maeder Xavier
Co-Supervisor: Maeder Xavier
EPF Lausanne, EDMX Materials Science and Engineering ◆

Guerra Carlos

Surface and Interface Engineering of Carbon Nanotubes with Metal Oxides Deposited via Atomic Layer Deposition
Supervisor: Park Hyung Gyu
Co-Supervisor: Utke Ivo
ETH Zurich, Dept. of Mechanical and Process Engineering ○

Hain Caroline

3D Nanoarchitected Materials for Catalysis and Sensing Applications
Supervisor: Philippe Laetitia
Co-Supervisor: Mischler Stefano
EPF Lausanne, EDMX Materials Science and Engineering ◆

Jurczyk Jakub

Focused Electron Beam Induced Deposition using low vapour pressure compounds (ELENA ITN project)
Supervisor: Utke Ivo
Co-Supervisor: Kapusta Czeslaw
AGH University of Science and Technology, Cracow, PL, Dept. of Solid State Physics ◆

Osenberg David

TBD
Supervisor: Mischler Stefano
Co-Supervisor: Philippe Laetitia
EPF Lausanne, EDMX Materials Science and Engineering ◆

Peruzzi Cinzia

Nanoscale deformation mechanisms and yield prediction of lamellar bone
Supervisor: Mazza Edoardo
Co-Supervisor: Schwiedrzik Jakob
ETH Zurich, Dept. of Mechanical and Process Engineering ◆

Pip Petai

Synthesis and characterisation of magnetic metamaterials
Supervisor: Heydermann Laura
Co-Supervisor: Philipope Laetitia
ETH Zurich, Materials Science Dept. ◆

Schürch Patrik

Creation of 2D and 3D nanostructures for photovoltaic devices and mechanical testing
Supervisor: Nüesch Frank
Co-Supervisor: Philippe Laetitia
EPF Lausanne, Materials Science Dept. ◆

Thomas Keith

Combinatorial investigation of hardening mechanisms in compositional gradient and multilayer thin films
Supervisor: Spolenak Ralph
Co-Supervisor: Michler Johann
ETH Zurich, Materials Science Dept. ○

Xie Tianle

The microstructures and mechanical properties of Cu-W nano-multilayers
Supervisor: Pethö Laszlo
Co-Supervisor: Pethö Laszlo
Hunan University, College of Materials Science and Engineering, Hunan, CN ◆

Ashrafi Habibabadi Amir

Advancing the knowledge of water droplet behavior and film forming on porous materials
Supervisor: Carmeliet Jan
Co-Supervisor: Derome Dominique
ETH Zurich, Dept. of Mechanical and Process Engineering ◆

Chen Mingyang

Sorption induced deformations of microporous material.
Supervisor: Carmeliet Jan
Co-Supervisor: Derome Dominique
ETH Zurich, Dept. of Mechanical and Process Engineering ◆

Dorostkar Omid

Stick-slip dynamics in dry and fluid saturated granular fault gouge investigated by numerical simulations
Supervisor: Carmeliet Jan
Co-Supervisor: Johnson Paul
ETH Zurich, Dept. of Civil, Environmental and Geomatic Engineering ○

Fischer Robert

TBD
Supervisor: Carmeliet Jan
Co-Supervisor: Derome Dominique
ETH Zurich, Dept. of Mechanical and Process Engineering ◆

Ito Parada Marcelo

The physics of wicking of textiles
Supervisor: Carmeliet Jan
Co-Supervisor: Derome Dominique
ETH Zurich, Dept. of Civil, Environmental and Geomatic Engineering ○

Lemrich Laure

Active and passive noise monitoring of granular media under different loading (compression /shear) and relation to macroscopic response and grain scale characteristics.
Supervisor: Carmeliet Jan
Co-Supervisor: Johnson Paul
ETH Zurich, Dept. of Civil, Environmental and Geomatic Engineering ○

Manickathan Lento

CFD study of impact of vegetation on heat island effect.
Supervisor: Carmeliet Jan
Co-Supervisor: Defraeye Thijs
ETH Zurich, Dept. of Mechanical and Process Engineering ◆

Markale Ishaan Hari

TBD
Supervisor: Carmeliet Jan
Co-Supervisor: Derome Dominique
ETH Zurich, Dept. of Mechanical and Process Engineering ◆

Mussetti Gianluca

TBD
Supervisor: Carmeliet Jan
Co-Supervisor: Brunner Dominik

Prawiranto Kevin

Solardrying of soft cellular materials: a multiscale approach.
Supervisor: Carmeliet Jan
Co-Supervisor: Defraeye Thijs
ETH Zurich, Dept. of Civil, Environmental and Geomatic Engineering ◆

Qin Feifei

LB Modelling of colloid drying
Supervisor: Carmeliet Jan
Co-Supervisor: Derome Dominique
ETH Zurich, Dept. of Mechanical and Process Engineering ◆

Sawant Nilesh

Lattice Boltzmann modelling of multiphase flow and crystallization in porous materials
Supervisor: Carmeliet Jan
Co-Supervisor: Ali Mazloomi
ETH Zurich, Dept. of Mechanical and Process Engineering ◆

Shah Jiggar

Vegetation as an urban heat island mitigation strategy
Supervisor: Carmeliet Jan
Co-Supervisor: Allegrini Jonas
ETH Zurich, Dept. of Mechanical and Process Engineering ◆

Shomali Ali

Hygromechanical behavior of archeological wood S2 cell wall layer, consolidated with PEG
Supervisor: Carmeliet Jan
Co-Supervisor: Derome Dominique
ETH Zurich, Dept. of Mechanical and Process Engineering ◆

Tagliavini Giorgia

Convective cooling of heat-sensitive products organised in macro-porous assemblies: a novel conjugate method
Supervisor: Carmeliet Jan
Co-Supervisor: Defraeye Thijs
Dept. of Mechanical and Process Engineering

Tsalicoglou Christina

TBD
Supervisor: Carmeliet Jan
Co-Supervisor: Allegrini Jonas
ETH Zurich, Dept. of Mechanical and Process Engineering ◆

Zhang Chi

Multiscale Modelling of wood cell S2 layer: Understanding wood swelling and moisture-induced shape memory.
Supervisor: Carmeliet Jan
Co-Supervisor: Derome Dominique
ETH Zurich, Dept. of Mechanical and Process Engineering ◆

Ahmet Zuned

Stochastic Atomic and Molecular Fluctuators and Resonators
Supervisor: Hug Hans J.
Co-Supervisor: Hug Hans J.
Uni Basel, Dept. Physics ◆

Chacko Aarati

Matallization of Polymers using HiPIMS
Supervisor: Hug Hans-Josef
Co-Supervisor: Thorwarth Kerstin
Uni Basel ◆

Feng Yaoxuan

Thin Film Systems supporting Skyrmions
Supervisor: Hug Hans J.
Co-Supervisor: Hug Hans J.
Uni Basel, Dept. Physics ◆

Fischer Maria

Al-based Oxynitride Coatings
Supervisor: Hug Hans Josef
Co-Supervisor: Thorwarth Kerstin
Uni Basel, Dept. Physics ◆

Gehrig Jeffrey

Stochastic Motion of Molecules adsorbed on single crystalline surfaces
Supervisor: Hug Hans J.
Co-Supervisor: Hug Hans J.
Uni Basel, Dept. Physics ◆

Irziqat Bahaaeddin

TBD
Supervisor: Ernst Karl-Heinz
Co-Supervisor: Ernst Karl-Heinz
Uni Zürich, Dept. Chemistry ◆

Kawecki Maciej

Sub-micrometre-scale 3D Chemical Characterization of Organic and Biological Materials
Supervisor: Hug Hans J.
Co-Supervisor: Bernard Laetitia
Uni Basel, Dept. Physics ◆

Li Jingyi

Chemistry of functional molecules at metal surfaces
Supervisor: Ernst Karl-Heinz
Co-Supervisor: Ernst Karl-Heinz
Uni Zürich, Dept. Chemistry ○

Lie Hao

Stochastic Atomic and Molecular Fluctuators and Resonators
Supervisor: Hug Hans J.
Co-Supervisor: Hug Hans J.
Uni Basel, Dept. Physics ◆

Mairena Anais

Chiral molecules at surfaces
Supervisor: Ernst Karl-Heinz
Co-Supervisor: Ernst Karl-Heinz
Uni Zürich, Dept. Chemistry ○

Rieger Alexandra

Physical properties of buckybowl for
Supervisor: Ernst Karl-Heinz
Co-Supervisor: Ernst Karl-Heinz
Uni Zürich, Dept. Chemistry ○

Srivastava Gitika

Molecular machines
Supervisor: Ernst Karl-Heinz
Co-Supervisor: Ernst Karl-Heinz
Uni Zürich ◆

Trant Mathis

Plasma Parameters and Particle fluxes during Deposition of Transparent Hard Coatings
Supervisor: Hug Hans Josef
Co-Supervisor: Thorwarth Kerstin
Uni Basel, Dept. Physics ◆

Voigt Jan

TBD
Supervisor: Ernst Karl-Heinz
Co-Supervisor: Ernst Karl-Heinz
Uni Zürich, Dept. Chemistry ◆

Zhao Xue

Magnetization reversal mechanism in strongly Exchange-coupled double layers of Co/Pt and TbFe
Supervisor: Hug Hans J.
Co-Supervisor: Hug Hans J.
Uni Basel, Dept. Physics ○

Bommert Max

TBD
Supervisor: Greber Thomas
Co-Supervisor: Gröning Oliver
Uni Zürich, Physics ◆

Danese Martina

TBD
Supervisor: Corminboeuf Clemens
Co-Supervisor: Passerone Daniele
EPF Lausanne, Chemical Sciences and Engineering ◆

Darawish Rimah

TBD
Supervisor: Fasel Roman
Co-Supervisor: Fasel Roman
Uni Bern, Dept. of Chemistry and Biochemistry ◆

Eimre Kristjan

Novel challenges in the synthesis of carbon based nanostructures
Supervisor: Hutter Juerg
Co-Supervisor: Pignedoli Carlo
Uni Zürich, Dept. of Chemistry ◆

Gandus Guido

TBD
Supervisor: Luisier Mathieu
Co-Supervisor: Passerone Daniele
ETH Zurich, Dept. of Information Technology and Electrical Engineering ◆

Kinikar Amogh

TBD
Supervisor: Gambardella Pietro
Co-Supervisor: Fasel Roman Ruffieux Pascal
ETH Zurich, Dept. of Materials ◆

Mishra Shantanu

Electronic & magnetic properties of open-Shell graphene nanostructures
 Supervisor: Greber Thomas
 Co-Supervisor: Ruffieux Pascal
 Uni Zürich, Physik Institut ◆

Popoff Youri

TBD
 Supervisor: Luisier Mathieu
 Co-Supervisor: Gröning Oliver
 ETH Zurich, Dept. of Information Technology and Electrical Engineering ◆

Stolz Samuel

Chiral Intermetallic Surfaces for Enantioselective Reactions
 Supervisor: Brune Harald
 Co-Supervisor: Widmer Roland
 EPF Lausanne ◆

Aengenheister Leonie

Establishment and use of a perfused Transwell model to study nanoparticle-placenta interactions
 Supervisor: Sturla Shana J.
 Co-Supervisor: Buerki Tina Wick Peter
 ETH Zurich, Dept. of Health Sciences and Technology (Dept. of Health Sciences and Technology) ○

Anthis Alexandre

Investigating interactions of endogenous and engineered particles with biological systems
 Supervisor: Niederberger Markus
 Co-Supervisor: Herrmann Inge
 ETH Zurich, Dept. of Materials ◆

Batbaja Dugershaw Battuja

Studying nanomaterials at the placental barrier and their possible indirect fetotoxic effects
 Supervisor: tba
 Co-Supervisor: Bürki Tina
 tba ◆

Furer Lea

TBD
 Supervisor: tba
 Co-Supervisor: Bürki Tina
 tba ◆

Gerken Lukas

Nanoparticle enhanced radiotherapy
 Supervisor: tba
 Co-Supervisor: Herrmann Inge
 ETH Zurich, Dept. of Physics ◆

Hempt Claudia

Establishment and use of an advanced in vitro model to study nanomaterial-intestinal barrier interactions
 Supervisor: Sturla Shana
 Co-Supervisor: Buerki-Thurnherr Tina Wick Peter
 ETH Zurich, Dept. of Health Sciences and Technology ◆

Iranpour Anaraki Neda

Nano-X: Synthesis and dynamical in-situ X-ray diffraction and scattering studies on advanced fiber systems and functional crystalline matter
 Supervisor: Neels Antonia
 Co-Supervisor: Wick Peter

Keevend Kerda

Correlative cathodoluminescence electron microscopy bioimaging
 Supervisor: Grange Rachel
 Co-Supervisor: Herrmann Inge
 ETH Zurich, Dept. of Physics ◆

Korejwo Daria

Interaction of graphene related materials and abraded materials from reinforced nanocomposites with in vitro lung models
 Supervisor: Rothen-Rutishauser Barbara
 Co-Supervisor: Buerki Tina Wick Peter
 Uni Fribourg, Adolphe Merkle Institute ◆

Matter Martin

Bioactive Nanoparticles for Surgical Applications
 Supervisor: Pratsinis Sotiris E.
 Co-Supervisor: Herrmann Inge
 ETH Zurich, Dept. of Mechanical and Process Engineering ◆

May Sarah

Nanogenotoxicology and DNA repair mechanisms
 Supervisor: Bürkle Alexander
 Co-Supervisor: Hirsch Cordula/Wick Peter
 Uni Konstanz, Molecular Toxicology Group, Konstanz, DE ○

Particles-Biology Interactions**Netkueakul Woranan**

Epoxy/graphene-based materials nanocomposites: manufacturing, properties, and release scenarios of aerosol particles during their lifetime and their toxicity
 Supervisor: Wang Jing
 Co-Supervisor: Bürki Tina

Road Engineering/Sealing Components**Cavalli Maria Chiara**

Exploring fundamental Aspects of bio-modified reclaimed Asphalt Binder
 Supervisor: Mazza Eduardo
 Co-Supervisor: Poulidakos Lily
 ETH Zurich, Institute for mechanical systems ○

Conzelmann Nicholas

High Performance Aggregates for Sustainable Road Pavements
 Supervisor: Müller Christoph
 Co-Supervisor: Poulidakos Lily
 ETH Zurich, Institute for Energy technique ◆

Ghafoori Roozbahany Ehsan

Flow Behavior of Asphalt Mixtures under Compaction
 Supervisor: Partl Manfred
 Co-Supervisor: Jelagin Denis
 KTH, Stockholm, Sweden, SE, Building Materials ○

Piao Zhengyin

Urban waste for low noise urban roads
 Supervisor: Hellweg Stefanie
 Co-Supervisor: Poulidakos Lily
 ETH Zurich, Institute of Environmental Engineering (IfU) ◆

Tarpoudi Baheri Farrokh

Bitumen Based Intrinsically Icephobic Road Surfaces
 Supervisor: Poulidakos Dimos
 Co-Supervisor: Poulidakos Lily
 ETH Zurich, Institute for energy technique ◆

Structural Engineering**Dauti Dorjan**

A combined experimental and numerical approach to spalling of concrete in high temperature
 Supervisor: Dal Pont/Weber Stefano/Benedikt
 Co-Supervisor: Weber Benedikt
 Université Grenoble Alpes, Laboratory 3SR, FR ○

Doroudi Yashar

Dynamic effect of transition zone and rail corrugation on the bridge response
 Supervisor: Fernando Dilum
 Co-Supervisor: Ghafoori Elyas
 The University of Queensland, School of Civil Engineering, Brisbane, AU ○

Ehrhart Thomas

Homogenes und kombiniertes Buchen-Brettschichtholz: Technische Grundlagen zur Marktimplementierung als Bauprodukt für Biegeträger und Stützen
 Supervisor: Frangi Andrea
 Co-Supervisor: Steiger René
 ETH Zurich, Institut für Baustatik und Konstruktion ◆

Harmanci Yunus Emre

Long-term Resistance of Gradient Anchorage for Prestressed CFRP Strips in Structural Concrete Retrofitting' (LoReGra)
 Supervisor: Chatzi Eleni
 Co-Supervisor: Michels Julien
 ETH Zurich, Institute of Structural Engineering ○

Heydarinouri Hossein

Fatigue Strengthening of Metallic Bridge Connections using pre-stressed CFRP Laminates
 Supervisor: Nussbaumer Alain
 Co-Supervisor: Motavalli Masoud/Ghafoori Elyas
 EPF Lausanne, Resilient Steel Structures Laboratory RESSLab ◆

Hosseini Ardalan

Mixed-mode fatigue strengthening of metallic members using CFRP plates
 Supervisor: Nussbaumer Alain
 Co-Supervisor: Motavalli Masoud/Ghafoori Elyas
 EPF Lausanne, EPF Lausanne, Steel Structures Laboratory ICOM ◆

Izadi Mohammadreza

Retrofitting Fatigue prone connections in steel bridges using pre-stressed advanced materials
 Supervisor: Motavalli Masoud/Maalek Shahrokh
 Co-Supervisor: Ghafoori Elyas
 University of Tehran, School of Civil Engineering, Tehran, IR ○

Jalsan Khash-Erdene

Wireless Sensor Network Planning for Structural Health Monitoring
 Supervisor: Martinoli Alcherio
 Co-Supervisor: Feltrin Glauco
 EPF Lausanne, EPF Lausanne, School of Architecture, Civil and Environmental Engineering ENAC ◆

Structural Engineering

Li Weijie

Study of the tensile behaviour of CFRP-steel composite system
Supervisor: Lu Yiyao
Co-Supervisor: Ghafoori Elyas
Wuhan University, School of Civil Engineering, Wuhan, CN ○

Moshiri Niloufar

Bond behavior of prestressed CFRP to concrete using externally bonded reinforcement on groove (EBROG) method
Supervisor: Davood Mostofinejad
Co-Supervisor: Czaderski Christoph
Isfahan University of Technology (IUT), Structural Engineering, Isfahan, IR ○

Schranz Bernhard

Modeling of RC members strengthened and prestressed by a novel iron-based shape memory alloy reinforcement
Supervisor: Vogel Thomas
Co-Supervisor: Czaderski Christoph/Shahverdi Moslem
ETH Zurich, Institut für Baustatik und Konstruktion, IBK, ETH Zürich ◆

Wydler Jonas

Structural behaviour and reliability of connections in timber structures
Supervisor: Frangi Andrea
Co-Supervisor: Palma Pedro
Fachhochschule Nordwestschweiz, Institut für Baustatik und Konstruktion, IBK ◆

Yang Yajiao

Development of an iron-based SMA with higher recovery stress compared to existing Empa/re-fer alloy
Supervisor: Fiebig Manfred
Co-Supervisor: Shahverdi Moslem
University of Science and Technology Beijing, Materials Science and Engineering, Beijing, CN ◆

Technology and Society

Berr Marcus

Raw materials supply risk indicators for an integrated sustainability assessment based on Life Cycle Assessment (LCA) methodology
Supervisor: Nowack Bernd
Co-Supervisor: Wäger Patrick/Hischier Roland
ETH Zurich, Dept. of Environmental Systems Science ◆

Cai Yaping

A mechanistic study of microfiber release from synthetic textiles
Supervisor: Nowack Bernd
Co-Supervisor: Nowack Bernd
ETH Zurich, Dept. of Environmental Systems Science ◆

Goncalves Joao

Integrating serious games with stock and flow modelling to educate decision makers in systems thinking (working title)
Supervisor: Hilty Lorenz
Co-Supervisor: Wäger Patrick
Uni Zürich, Informatics ◆

Hauser Marina

TBD
Supervisor: Nowack Bernd
Co-Supervisor: Nowack Bernd
ETH Zurich, Dept. of Environmental Systems Science ◆

Holm Stefan

Developing an Agent-based Model of the Swiss Wood Market (working title)
Supervisor: Hilty Lorenz
Co-Supervisor:
Uni Zürich, Informatics ○

Kolpondinos (-Huber) Martina

Understanding Stakeholder Engagement in Requirements Engineering: Exploring Game-based Elicitation Methods for the Development of Sustainable Software Systems (working title)
Supervisor: Glinz Martin
Co-Supervisor: Hilty Lorenz
Uni Zürich, Informatics ○

Müller Sandra

Mining Anthropogenic and Geological Deposits: Evaluating the Accessibility of Scarce Metals from End of Life Products and the Earth's Crust under Sustainability Considerations
Supervisor: Williams Ian
Co-Supervisor: Wäger Patrick
University of Southampton, Centre for Environmental Sciences, Southampton / UK ○

Pinlova Barbora

TBD
Supervisor: Nowack Bernd
Co-Supervisor: Nowack Bernd
ETH Zurich, Dept. of Environmental Systems Science ◆

Technology and Society

Restrepo Eliette

Towards an Optimal Recovery of Critical Metals from End of Life Vehicles

Supervisor: Müller Daniel

Co-Supervisor: Wäger Patrick/Widmer Rolf

Norwegian Institute of Science and Technology, Dept. of Energy and Process Engineering, Trondheim, NO ♦

Roca Puigros Marta

Resource and emission scenarios to a post-fossil Swiss city

Supervisor: Müller Daniel

Co-Supervisor: Wäger Patrick

Norwegian Institute of Science and Technology, Dept. of Energy and Process Engineering, Trondheim, NO ♦

Wenger Delphine

Modeling the flows of microplastics in the environment

Supervisor: Nowack Bernd

Co-Supervisor: Nowack Bernd

ETH Zurich, Dept. of Environmental Systems Science ♦

Thin Films and Photovoltaics

Hertwig Ramis

TBD

Supervisor: Tiwari Ayodhya N.

Co-Supervisor: Bücheler Stephan

University of Liverpool, UK ♦

Andres Christian

TBD

Supervisor: Tiwari Ayodhya Nath

Co-Supervisor: Romanyuk Yaroslav

ETH Zurich ♦

Avancini Enrico

TBD

Supervisor: Tiwari Ayodhya Nath

Co-Supervisor: Buecheler Stephan

ETH Zurich, Dept. of Information Technology and Electrical Engineering ♦

Bolat Sami

TBD

Supervisor: Tiwari Ayodhya

Co-Supervisor: Romanyuk Yaroslav

ETH Zurich ♦

Cabas Vidani Antonio

TBD

Supervisor: Tiwari Ayodhya

Co-Supervisor: Romanyuk Yaroslav

ETH Zurich ♦

Dubey Romain

TBD

Supervisor: Kovalenko Maksym

Co-Supervisor: Kravchik Kostiantyn

ETH Zurich, Dept. of Chemistry and Applied Biosciences ♦

Feurer Thomas

TBD

Supervisor: Tiwari Ayodhya Nath

Co-Supervisor: Buecheler Stephan

ETH Zurich, Dept. of Information Technology and Electrical Engineering ♦

Guntlin Christoph

TBD

Supervisor: Kovalenko Maksym

Co-Supervisor: Kovalenko Maksym

ETH Zürich, Dept. Chemie und Angewandte Biowissenschaften ♦

Lingg Martina

TBD

Supervisor: Tiwari Ayodhya Nath

Co-Supervisor: Perrenoud Julian

ETH Zurich ♦

Löckinger Johannes

TBD

Supervisor: Tiwari Ayodhya

Co-Supervisor: Romanyuk Yaroslav

ETH Zurich ♦

Moser Thierry

TBD

Supervisor: Tiwari Ayodhya

Co-Supervisor: Bücheler Stephan

ETH Zurich ♦

Pisoni Stefano

TBD
Supervisor: Tiwari Ayodhya Nath
Co-Supervisor: Buecheler Stephan
ETH Zurich ◆

Sastre Pellicer Jordi

TBD
Supervisor: Tiwari Ayodhya
Co-Supervisor: Bücheler Stephan
ETH Zurich ◆

Wang Shutato

TBD
Supervisor: Kovalenko Maksym
Co-Supervisor: Kovalenko Maksym
ETH Zürich, Dept. Chemie und Angewandte Biowissenschaften ◆

Yang Shih-Chi

TBD
Supervisor: Tiwari Ayodhya N.
Co-Supervisor: Bücheler Stephan
National Taiwan University ◆

Braun Oliver

Thermoelectric Effects in Nanoscale Devices
Supervisor: Zardo Ilaria
Co-Supervisor: Calame Michel
Uni Basel ◆

Cao Jingming

Revealing key properties of wood with spectroscopic THz imaging
Supervisor: Burgert Ingo
Co-Supervisor: Zolliker Peter
ETH Zurich, Wood Materials Science ◆

El Abbassi Maria

Study of graphene based molecular junctions.
Supervisor: Calame Michel
Co-Supervisor: Calame Michel
Uni Basel ○

Gagnidze Tornike

Dielectric enhancement for high DC cuprat super conductors
Supervisor: Bona Gian-Luca
Co-Supervisor: La Mattina Fabio
Uni Zürich ◆

Gemma Andrea

Thermal transport at the molecular scale
Supervisor: Calame Michel
Co-Supervisor: Gottsman Bernd
Uni Basel, Departement Physik ◆

Grotevent Matthias

Ultrasensitive quantum dot-graphene infrared detector arrays
Supervisor: Kovalenko Maxim
Co-Supervisor: Shorubalko Ivan
ETH Zurich ◆

Lüder Lars

Conductive metal-organic architectures for biochemical sensing
Supervisor: Calame Michel
Co-Supervisor: Calame Michel
Uni Basel, Departement Physik ◆

Mermoud Yves

Ion sensitive transistors for biosensing
Supervisor: Calame Michel
Co-Supervisor: Calame Michel
Uni Basel ◆

Overbeck Jan

Optoelectronic Nanojunctions
Supervisor: Calame Michel
Co-Supervisor: Calame Michel
Uni Basel ◆

Römmeler Arno

NOQAPTJ Non-destructive quality assessment of polymer tube joints
Supervisor: Dual Jürg
Co-Supervisor: Zolliker Peter
ETH Zurich, Institut für mechanische Systeme ◆

Transport at Nanoscale Interfaces

Synhaivska Olena

Silicon Nanowire ISFET based sensor for Biochemical Sensing Applications
Supervisor: Calame Michel
Co-Supervisor: Calame Michel
Uni Basel ◆

Valzania Lorenzo

Thz imaging and modeling of the interface
Supervisor: Feurer Thomas
Co-Supervisor: Hack Erwin
Uni Bern, IAP ◆

Urban Energy Systems

Bünning Felix

TBD
Supervisor: Lygeros John
Co-Supervisor: Bollinger Andrew
ETH Zurich, Dept. of Information Technology and Electrical Engineering ◆

Dominguez Hernandez Cristina

TBD
Supervisor: Carmeliet Jan
Co-Supervisor: Orehoung Kristina
ETH Zurich, Dept. of Mechanical and Process Engineering ◆

Fumey Benjamin

TBD
Supervisor: Griffiths Philip
Co-Supervisor: Baldini Luca
Ulster University, Built Environment Research Institute, Belfast, UK ◆

Hohmann Marc

Polynomial Optimization in Energy Systems
Supervisor: Lygeros John
Co-Supervisor: Dorer Viktor
ETH Zurich, Dept. of Information Technology and Electrical Engineering ○

Marquant Julien

Multiscale Urban Energy System Optimization Using Spatio-Temporal Clustering
Supervisor: Carmeliet Jan
Co-Supervisor: Bollinger Andrew
ETH Zurich, Dept. of Civil, Environmental and Geomatic Engineering ○

Migliani Somil

Optimal energy system and retrofit measures for residential buildings/districts: A detailed modeling perspective on ground source heat pumps
Supervisor: Carmeliet Jan
Co-Supervisor: Orehoung Kristina
ETH Zurich, Dept. of Civil, Environmental and Geomatic Engineering ○

Murray Portia

TBD
Supervisor: Carmeliet Jan
Co-Supervisor: Orehoung Kristina
ETH Zurich, Dept. of Mechanical and Process Engineering ◆

Thrampoulidis Emmanouil

TBD
Supervisor: Carmeliet Jan
Co-Supervisor: Orehoung Kristina
ETH Zurich, Dept. of Mechanical and Process Engineering ◆

Waibel Christoph

Simulation-based Optimization of Urban Form and Multi-Energy Systems
Supervisor: Carmeliet Jan
Co-Supervisor: Evins Ralph
ETH Zurich, Dept. of Civil, Environmental and Geomatic Engineering ○

Wang Danhong

TBD
Supervisor: Carmeliet Jan
Co-Supervisor: Orehoung Kristina
ETH Zurich, Dept. of Mechanical and Process Engineering ◆

Empa Activities 2018

Teaching Activities

Swiss Federal Institute of
Technology, Zürich (ETH)

Architecture	Allegrini Jonas/Jan Carmeliet Bauphysik 3: Energie + Komfort
	Allegrini Jonas/Jan Carmeliet/Dominique Derome Building Physics: Theory and Application
	Allegrini Jonas/Jan Carmeliet/Heini Wernli/Dominik Brunner/ Jean-Marc Wunderli/ Christoph Schär Urban Physics
	Baldini Luca Building Systems
	Bollinger Andrew Building Control & Automation
	Defraeye Thijs/Jan Carmeliet Building Physics II
	Derome Dominique/Carmeliet Jan Materials and Construction
	Derome Dominique/Carmeliet Jan/Allegrini Jonas Building Physics: Theory and Application
	Dorer Viktor Building Systems: Natural and Mech. Ventilation & Urban Energy Systems
	Eggenschwiler Kurt Raumakustik
	Koebel Matthias/Carmeliet/von Trzebiatowski/Winnefeld/Zimmermann Baumaterialien I
	Matthias Koebel/Zimmermann Tanja/Trzebiatowski Oliver/Winnefeld Frank Baumaterialien 1
	Mavromatidis Georgios Building Physics III: Energy and Comfort, Urban Physics
	Mavromatidis Georgios Whole Building Simulation
	Orehounig Kristina/Jan Carmeliet/Georgios Mavromatidis Building Physics III: Energy and Comfort, Urban Physics
	Orehounig Kristina/Georgios Mavromatidis Whole Building Simulation
	Schoenwald Stefan/Carmeliet Jan/Frangi A./ Udert K. M. Indoor Environment, Resources and Safety
	Sulzer Matthias Building Systems
	Winnefeld Frank Mineral building materials as part of the lecture „Baumaterialien I: Struktur-Eigenschaften-Verwendung“, Bachelor Programme Architecture
	Wunderli Jean Marc/Jan Carmeliet Urban physics
Zhou Xiaohai/Jan Carmeliet/Aytac Kubilay/Jonas Allegrini/Dominique Derome Building Physics: Theory and Applications	
Chemistry	Reimann Stefan/Renato Zenobi Analytische Strategie
Chemistry and Applied Biosciences	Bleiner Davide/Figi Renato / Schwarz Gunnar / Günther Detlef Methoden der quantitativen Elementanalytik / X-ray Fluorescence Spectrometry
	Kovalenko Maksym Inorganic Chemistry II
	Kovalenko Maryna/Romayuk Yroslav/ Lippert Thomas Functional Inorganics
Civil Engineering	Zhou Xiaohai/Jan Carmeliet/Aytac Kubilay Moisture Transport in Porous Media

Civil, Environmental and Geomatic Engineering	Buchmann Brigitte/Wang Jing Luftreinhaltung
	Burgert Ingo <ul style="list-style-type: none"> • Holz und Holzwerkstoffe • Holzbearbeitung und -verarbeitung • Holzphysik • Holzstruktur und Funktion • Werkstoffe I und IV
	Eggenschwiler Kurt/Wunderli Jean Marc Lärmbekämpfung
	Fontana Mario/Ghafoori Elyas Fatigue and fracture at Stahlbau III
	Grönquist Philippe Werkstoffe III
	Henne Stephan/Reimann Stefan/Gerecke Andreas Air Pollution Modeling and Chemistry
	Leemann Andreas Alkali-aggregate reaction in concrete, part of the "Concrete Material Science" course
	Loser Roman/Toropovs Nikolajs Werkstoffe III - Beton: Technologie, Festigkeit, Verformbarkeit
	Lura Pietro/Wyrzykowski Mateusz/Griffa Michele Shrinkage and Cracking of Concrete: Mechanisms and Impact on Durability
	Motavalli Masoud/Czaderski Christoph/Feltrin Glauco/Ghafoori Elyas/Shah-verdi Moslem/Widmann Robert Fibre composite material in structural Engineering
	Olaniran Samuel Werkstoffe III
	Partl Manfred Bituminöse Werkstoffe
	Reimann Stefan/Henne Stephan/Gerecke Andreas Air Pollution Modeling and Chemistry
	Rüggeberg Markus Werkstoffe III
	Steiger René <ul style="list-style-type: none"> • Erdbebegerechte Konzeption, Bemessung und Konstruktion von Holzbauten • Holz und Holzwerkstoffe: Ernte, Strukturmerkmale und Produktion von Vollholz
	Schubert Mark Holzbe- und Verarbeitung
	Wang Jing <ul style="list-style-type: none"> • Air quality and aerosol mechanics • Environment and Computer Laboratory: Air quality measurement
	Wang Jing/Buchmann Brigitte Luftreinhaltung
	Wang Jing/Burlando Paolo Environmental Engineering Seminars
	Wang Jing/Wick Peter Air quality and health impact
Wick Peter/Jing Wang/Hans Schleibinger Health Impact, Toxicity and Industrial Hygiene	
Wyrzykowski Mateusz/Hu Zhangli Werkstoffe III: Mineralische Bindemittel	
Competence Centre for Materials Science and Technology (CCMX)	Erni Rolf Basics of TEM and STEM
Earth Sciences	Liati Anthi/Guillon Marcel/von Quadt Albrecht/Busemann Henner/Fellini Giuditta Advanced Geochronology
Environmental Systems Science	Brunner Dominik/Imad El Haddad Troposphärenchemie
	Mohn Joachim/Werner Roland/Buchmann Nina/Siegwolf Rolf Stable Isotope Ecology of Terrestrial Ecosystems
	Nowack Bernd/Som Claudia Gesellschaftlicher Umgang mit aktuellen Umweltrisiken

Environmental Systems Science	Nowack Bernd/Bucheli Thomas/Denise Mitrano Nanomaterials in the Environment
Health Sciences and Technology	Annaheim Simon Praktikum Thermophysiologie
	Maniura Katharina <ul style="list-style-type: none"> • Biocompatible Materials • Principles in Tissue Engineering
	Nyström Gustav Food Material Science
	Rossi René Thermoregulation and Sports textiles
	Rossi René/Christina Spengler Sportphysiologie
	Wick Peter Nanostructured Materials Safety
Health Sciences and Technology/Inst. of Human Movement Sciences a. Sport	Eggenberger Patrick/De Bruin Eling/Krebs Andreas Exercise Sciences
Information Technology and Electrical Engineering	Buecheler Stephan/Romanyuk Yaroslav/Tiwari Ayodhya N. Solar Cells
	Grossmann Günter/Sennhauser Urs Physics of Failure and Failure Analysis of Electronic Devices and Equipment
	Held Marcel/Sennhauser Urs <ul style="list-style-type: none"> • Physics of Failure and Failure Analysis of Electronic Devices and Equipment • Reliability of Electronic Equipment and Systems
	Heutschi Kurt Acoustics 1 und 2
	Romanyuk Yaroslav/Tiwari Ayodhya/Buecheler Stephan Solar Cells
	Tiwari Ayodhya Nath/Yaroslav Romanyuk/Stephan Buecheler Solar Cells
Inorganic Chemistry	Renato Figi WD-XRF-Praktikum
Institut für Mechanische Systeme	Hopf Raoul Mechanics 1: Kinematics and Statics (Colloquium)
	Reimann Stefan/Peter Thomas/Stenke Andrea Stratospheric chemistry
Institute of Agricultural Sciences	Yu Longfei Isotope – Ecology Course
Institute of Environmental Engineering	Gerber Andreas/Widmer Rolf Prospective Environmental Assessments
Institute of Technology in Architecture	Defraeye Thijs Building Physics II: Moisture
	Defraeye Thijs/Jan Carmeliet Moisture and Durability
Labor für Umwelt-ingenieurwissenschaften (LUIW)	Tuchschnid Martin/Urs Gfeller Mobile Röntgenfluoreszenz-Spektrometrie
Materials	Barbezat Michel/Roth Manfred/Graule Thomas Integrity of Materials and Structures
	Battaglia Corsin/Marie-Claude Bay/Francesco Pagani Lithium-ion batteries: material synthesis and device characterization
	Borgschulte Andreas Chemical Analysis and Spectroscopy for Energy Applications
	Borgschulte Andreas/Willeke Martin/Battaglia Corsin/Walde Peter Praktikum III
	Burgert Ingo/Cabane Etienne Biological and bioinspired materials
	Clemens Frank Verbundwerkstoffe
	Clemens Frank/Terrasi Givoanni Advanced Composite and Adaptive Material Systems

Materials	Erni Rolf Advanced Analytical TEM
	Erni Rolf <ul style="list-style-type: none"> • Electron Microscopy in Material Science • High Resolution Transmission Electron Microscopy
	Graule Thomas/Barbezat Michel/Roth Manfred Integrity of Materials and Structures
	Graule Thomas/Niederberger Markus/Studart André Keramik I
	Hegemann Dirk/Ralph Spolenak/Andre Studart Materials @ Work II
	Heuberger Manfred/N.D. Spencer/L. Isa Surfaces, Interfaces & their applications
	Jeurgens Lars/Liliana Duarte Guest Lecture "Advanced-Joining Technologies"
	Kübler Jakob/Dorina Opris Material Science II, part mechanical properties of ceramics
	Passerone Daniele/Pignedoli Carlo Antonio Molecular and Materials Modelling
	Pignedoli Carlo Antonio Molecular and Materials Modeling
	Schmutz Patrik Surfaces, Interfaces and their Applications II
	Schmutz Patrik/Olga Guseva Practical course III/IV: Introduction in Electrochemical Impedance Spectroscopy (EIS) Examples of batteries and anodized barrier oxides characterization
	Terrasi Giovanni P./Kovacs Gabor/Clemens Frank Advanced Composite and Adaptive Material Systems
	Wäger Patrick/Beloin Saint-Pierre Didier/Böni Heinz/Haarman Arthur/Widmer Rolf Sustainable Materials Management: Concepts, Methods and Principles
Materials Sciences	
Mechanical and Process Engineering	Bergamini Andrea Adaptive Materials for Structural Applications
	Brunner Dominik/Carmeliet Jan/Schär Christoph/Wernli Heini/Wunderli Jean-Marc/Jonas Allegrini Building Physics IV: Urban Physics
	Dimopoulos Eggenschwiler Panayotis/Boulouchos Konstantinos IC-Engines and Propulsion Systems II
	Hack Erwin/Brönnimann Rolf Optical Methods in Experimental Mechanics
	Kammermann Thomas Combustion and Reactive Processes in Energy and Materials Technology
	Koller Roland/Guillaume Michel Betriebsfestigkeit
	Kovacs Gabor <ul style="list-style-type: none"> • AK Seilbahnen • Seilbahnen
	Mazza Edoardo <ul style="list-style-type: none"> • Continuum Mechanics I • Kinematik und Statik
	Mazza Edoardo/Dr Röhrnbauer Barbara Nonlinear Continuum Mechanics
	Meier Urs
	Papetti Viola/Herrmann Kai Diagnostics in Experimental Combustion Research
	Terrasi Giovanni P. GL zum Bemessen von Kunststoffbauteilen
	Zemp Armin Turbomachinery Mechanics & Dynamics
	Faculty of material science and ceramics

**Albert-Ludwigs-Universität
Freiburg, DE**

Institute of Earth and Environmental Sciences

Remhof Arndt

- Röntgenpulverdiffraktometrie
- Aktuelle Fragen der Kristallzüchtung - Recent Publications

Vogt Ulrich F.

- Crystalline Materials: Technical and Applied Mineralogy, Modern Ceramics, Cements, and Glasses
- Energie und Georessourcen: Angewandte Mineralogie mit dem Schwerpunkt Keramische Materialien

**École Polytechnique
Fédérale, Lausanne (EPF)**

Institute of Earth and Environmental Sciences

Remhof Arndt

X-Ray Diffraction by Crystals

Atmospheric Chemistry Modelling Laboratory

Reimann Stefan/Takahama Satoshi

Measurements of air pollutants

Chemistry

Züttel Andreas

Chimie général avancer 160a

Züttel Andreas

Thermodynamics of energy conversion

EDMX

Hoffmann Patrik/Christian Leinenbach/Kilian Wasmer

Laser materials processing

EDPO-Doctoral School

Romanyuk Yaroslav/Nüesch Frank/Haug Franz-Josef

Modern photovoltaic technologies

EPL

Lüthi Thomas

Non-destructive Evaluation Methods

Institut für Materialwissenschaften

Nüesch Frank

Organic Semiconductors

Materials Science

Michler Johann

Materials Selection

Philippe Laetitia/van Herle Jan/Mischler Stefano

Electrochemistry for Materials Technology

Microtechnique

Hoffmann Patrik

Chimie des Surfaces

Microtechnique; Materials Science and Engineering, Mechanical Engineering

Hoffmann Patrik

Laser Microprocessing

Physics

Nüesch Frank

Modern Photovoltaic Technologies

School of Engineering

Vaucher Sébastien/Siegmann Stephan/Michler Johann

Materials Selection

Amsterdam University, NL

Physics

Derome Dominique/Carmeliet Jan/Prat Marc/Shahidzadeh Noushine

Physics for art conservation

Berner Fachhochschule

Institut für Siedlungsentwicklung und Infrastruktur

Raab Christiane/Hugener Martin/Partl Manfred/Hean Sivotha

CAS Modul Materialtechnik und Materialprüfung

Carleton University, Ottawa, CA

Department of Civil and Environmental Engineering

Raab Christiane

Assessment of Interlayer Bonding Properties with static and dynamic Devices

Department of Civil and Environmental Engineering

Raab Christiane

Empa and the Laboratory Road Engineering/Sealing Components

Fachhochschule Nordwestschweiz (FNHW)

CAS Betontechnologie

Wäger Patrick

Studiengang Energie- und Umwelttechnik, Modul Abfallwirtschaft und Recycling

Life Sciences School Institute for Ecopreneurship

Leemann Andreas

Neues aus der Forschung

Technik/Engineering

Zennegg Markus

Environmental Risk Assessment

Wasmer Kilian/Hadad Mousab

Einführung in die Tribologie & Metallographie

**Fernfachhochschule
Schweiz (FFHS)**

**Grenoble Alpes University,
FR**

ESONN School of Nanosciences & Nanotechnologies

Hug Hans J.

Scanning Probe Microscopy

Harbin Institute of Technology (HIT), Harbin

Civil Engineering

Meier Urs

**Hochschule für Technik
Rapperswil (HSR)**

IBU Institut für Bau und Umwelt

Czaderski Christoph

Tragwerksverstärkung

Hochschule Luzern, Luzern	Business Engineering	Bollinger Andrew Sustainable Energy Systems
	T&A	Dorer Viktor Natural and Hybrid Ventilation
	T&A	Sulzer Matthias EEIS (Energieversorgung Areale)
Höhere Fachschule TGZ, Wallisellen		Hischier Roland Ökologie
	KTH Stockholm, SE	School of Computer Science and Communications Hilty Lorenz Sustainable Development for Computer Science and Engineering
Norwegian Institute of Science and Technology, Trondheim, NO	Structural Engineering	Lothenbach Barbara/De Weerd Klaartje/Winnefeld Frank/Geiker Mette/Machner Alisa Doctoral course: Hydration and microstructure characterization of cementitious materials
Polytechnique Montréal – CIRAI, CA	Génie Industriel	Beloin-Saint-Pierre Didier/Margni Manuele/Patouillard Laure Regionalization in life cycle impact assessment: hands on with IMPACT World+ TM Workshop
Schweizerische Textilfachschule SVI, Zurich	STF	Amberg Martin/Hegemann Dirk/Heuberger Manfred Nanotechnologie TDT4
	Packaging Manager / Grundlagenseminar	Hischier Roland Ökologie im Verpackungsbereich
Technische Universität München, DE	Limnologische Station	Jacob Peter Einführung in die Rasterelektronenmikroskopie
Technische Universität Freiberg, DE	Verfahrens- und Umwelttechnik	Graule Thomas/Aneziris Christos Nanoskale Verbundwerkstoffe: Eine Herausforderung für die Prozesstechnik
Universidade Federal do Rio Grande	Material Engineering	Clemens Frank Powder Technology
Università degli studi Parma, IT	Energy	Dimopoulos Eggenschwiler Panayotis/Gambarotta Agostino IC-Engines
	Engineering and Architecture	Partl Manfred Pavement Design and Materials
Universität Freiburg im Breisgau, DE	Forest Sciences	Schwarze Francis <ul style="list-style-type: none"> • Bäume in der Stadt • Pilze als Schlüsselfaktoren in Umweltfragen
	School for Humanities and Social Sciences	Wäger Patrick/Böni Heinz/Haarman Arthur/Hischier Roland/ Widmer Rolf Auf dem Weg zu einer Kreislaufwirtschaft: Bedingungen, Möglichkeiten und Grenzen
		Wäger Patrick/Gasser Michael/Hilty Lorenz/Hischier Roland/Mader Clemens/Widmer Rolf Bedingt die Energiewende eine Rohstoffwende?
Université de Haute-Alsace, FR	LPMT	Rossi René Thermal physiology and functional clothing
University of Applied Sciences, Bern	Architecture, Wood and Civil Engineering	Steiger René <ul style="list-style-type: none"> • Assessment and retrofitting of timber structures • Earthquake and design of timber structures
	Institut für Siedlungsentwicklung und Infrastruktur	Raab Christiane/Nicolas Bueche AK Strassenbaumaterialien
University of Applied Sciences, Bern	Lebensmitteltechnologie	Hischier Roland Verpackungen unter ökologischer Betrachtung
		Eggenschwiler Kurt Bau-/Raumakustik CAS Akustik
University of Applied Sciences, Horw	Energietechnik	Heer Philipp Energietechnik
University of Applied Sciences, Muttenz		Eggenschwiler Kurt/Heutschi Kurt/Tröbs Hans Martin/Wunderli Jean Marc/Pachale Urs/Haselbach Markus Messpraktikum, CAS Akustik
	Faculty of Physiotherapy Graubünden	Eggenberger Patrick Modul Lebensphasen, Training und körperliche Aktivität vom Kindes- bis zum Seniorenalter
University of Applied Sciences of Southern Switzerland (SUPSI)		Eggenschwiler Kurt Lärmbekämpfung
University of Applied Sciences, Wädenswil		

University of Applied Sciences, Wädenswil

Departement Life Sciences Institut für Chemie und Biotechnologie ICBT	Zennegg Markus Ökologie für Chemiker. Persistente organische Schadstoffe in der Umwelt
ICBT Institut für Chemie und Biotechnologie	Gauch Marcel Umweltauswirkungen von Biotreibstoffen
Institut Umwelt und Natürlich Ressourcen	Hueglin Christoph/Krebs Rolf Umweltchemie und Analytik
Institute of Chemistry and Biological Chemistry	Heeb Norbert <ul style="list-style-type: none"> • Ökologie Vorlesung: Chemie und Umwelt • Vertiefungspraktikum Analytische Chemie

University of Applied Sciences, Winterthur

Gesundheit	Fontana Piero <ul style="list-style-type: none"> • Modulation der physiologischen Adaptation durch Ernährung • Physiologische Adaptation an kardiovaskuläre und muskuläre Reize
Institute of Materials and Process Engineering (IMPE)	Hegemann Dirk/Martin Winkler/Toni Schneider/Stefan Siegmann Beschichtungen
Verfahrenstechnik, Department of Industrial Technologies	Clemens Frank/Penner Dirk Funktionsmaterialien

University of Applied Sciences, Zurich

Institut für Chemie & Biotechnologie (ICBT) (Urs Baier)	Borgschulte Andreas/Bach Christian/(Urs Cabalzar) Wasserstoff als Energieträger: Produktion – Speicherung – Nutzung
Institut für Chemie und Biotechnologie (ICBT)	Cabalzar Urs Biogene Energieträger
Institut für Nachhaltige Entwicklung (INE)	Cabalzar Urs/Dimopoulos-Eggenschwiler Panayotis/Omanovic Andny Fliegen & Fahren mit Biofuels
Institut für Umwelt und Natürliche Ressourcen IUNR	Wäger Patrick Modul Ressourcenbewirtschaftung

University of Basel

	Calame Michel Nanowissenschaften 24 KP
Kunstwissenschaft	Crockett Rowena Ringvorlesung: Stick-slip: Der Klang der Kunst
Medical Faculty	Sadeghpour Amin Materials Science and Biomaterials
Physics	Braun Oliver Molecular and carbon-based electronic systems (2 CP)
	Calame Michel/Overbeck Jan/Braun Oliver/EI Abbassi Maria/Perrin Mickael Project Work Nanoscience
	Calame Michel/Poggio Martino Introduction to Physics I 6 CP
	Calame Michel/Glatzel Thilo Molecular and carbon-based electronic systems (2 CP)
	Hug Hans J. Magnetismus und magnetische Materialien
	Mermoud Yves Introduction to Physics I - exercises classes
	Synhaivska Olena Introduction to Physics II
Physics, SNI	Shorubalko Ivan/Michel Calame/Huan Ma Focused Ion Beams
Umweltgeowissenschaften	Reimann Stefan Umweltsystem Atmosphäre: Luftverschmutzung und Klimaerwärmung

University of Berne

	Widmer Roland/Okan Deniz Introduction ESCA
Biomedical Engineering	Maniura Katharina Applied Biomaterials
Chemistry and Biosciences	Widmer Roland/Samuel Stolz Introduction ESCA
Earth Sciences	Lothenbach Barbara Master course: Applied geochemistry and thermodynamic modelling of cement hydration
Medizinische Fakultät, Biomedical Engineering	Dommann Alex Applied Biomaterials

University of Berne	Medizinische Fakultät, Biomedical Engineering	Dommann Alex/Luginbuehl Reto (Bio)Materials
	Physics	Fasel Roman Introduction to the Physics and Chemistry of Surfaces
University of Edinburgh, UK	Institute of Infrastructure	Terrasi Giovanni P. Mechanics of composites for repairing and strengthening structures
University of Fribourg	Chemistry	Neels Antonia Applied X-ray Diffraction Methods
	Interfakultär	Züttel Andreas Umweltwissenschaften, Physik
	Physics	Züttel Andreas Physik im Alltag
University of Groningen	Product Technology	Toncelli Claudio/Picchioni Francesco/Heeres Hero Jan Industrial Polymer Chemistry
University of Svalbard, UNIS), NO	Arctic Technology	Reimann Stefan/Schmidbauer Norbert Techniques for the Detection of Organo-Chemical Pollutants in the Arctic Environment
University of Teheran, IR	Faculty of Civil Engineering	Motavalli Masoud/Ghafoori Elyas/Shahverdi Moslem Fibre composite material in structural Engineering
	Faculty of Civil Engineering	Motavalli Masoud/Shahverdi Moslem Fibre Composite material in Structural Engineering
University of Zurich	Biology	Maniura Katharina Regenerative Medicine and Applied Tissue Engineering
		Rottmar Markus Regenerative Medicine and Applied Tissue Engineering
	Chemistry	Borgschulte Andreas NanoChemistry
		Ernst Karl-Heinz/Seeger Artus Advanced Physical Chemistry
		Srivastava Gitika/Ernst Karl-Heinz/Christian Wäckerlin Chemical Processes at surfaces (as Teaching Assistant)
	Geography	Kuhlmann Gerrit/Daniel Henke et al. Fernerkundung und Geographische Informationswissenschaft V (Methoden der Fernerkundung)
	Informatik	Hilty Lorenz Digitalisation and Sustainable Development
		Hilty Lorenz Informatik, Ethik und Gesellschaft
		Hilty Lorenz Wirtschaftsinformatik I
		Hilty Lorenz/Marc Chesney/Markus Huppenbauer/Bernhard Schmid/Piet Spaak/Katharina Michaelowa u.a. Einführung in die Grundlagen der Nachhaltigkeit
Physics	Mishra Shantanu Laboratory Course for Bachelor Students in Physics	
ZHdK Zurich University of the Arts	Department of Music	Heutschi Kurt Audiotechnik

Empa Activities 2018

Publications

Empa staff publish in many national and international scientific and technical journals as well as in daily press and other special organs. Please note that the list below represents only the scientific and technical journals.

General Management

Balogh-Michels, Z./Faecht, A./Kleiner, S./Margraf, P./Dommann, A./Neels, A.

In situ XRD experiments on the growth of expanded austenite using different process gases. Defect Diffus. Forum 2018, 383, 142–146. (joint paper) ▲

Joos, F./Buchmann, B.

Preface: The 10th international carbon dioxide conference (ICDC10) and the 19th WMO/IAEA meeting on carbon dioxide, other greenhouse gases, and related measurement techniques (GGMT-2017). Atmos. Chem. Phys. 2018, 18 (11), 7841–7842. ▲

Kozak, R./Prieto, I./Arroyo Rojas Dasilva, Y./Erni, R./von Känel, H./Bona, G. L./Rossell, M. D.

A comparative study of defect formation in GaAs nanocrystals selectively grown on nanopatterned and flat Si(001) substrates. Micron 2018, 113, 83–90. (joint paper) ▲

Richner, P./Heer, P./Largo, R./Marchesi, E./Zimmermann, M.

NEST – a platform for the acceleration of innovation in buildings. Inf. Constr. 2018, 69 (548), e222 (8 pp.). (joint paper) ▲

Richner, P./Largo, R.

NEST – exploring the future of buildings. In Expanding boundaries. Systems thinking in the built environment, presented at the Sustainable built environment (SBE) regional conference Zurich 2016, Zurich, Switzerland, June 15–17, 2016/Habert, G., Schlueter, A., Eds./vdf Hochschulverlag: Zurich, Switzerland, 2016/pp 160–164.

Richner, P./Heer, P./Largo, R./Marchesi, E./Zimmermann, M.

NEST – a platform for the acceleration of innovation in buildings. Inf. Constr. 2018, 69 (548), e222 (8 pp.). (joint paper) ▲

Advanced Materials and Surfaces

Anis, A. L./Talari, M. K./Kishore Babu, N./Ismail, M. H./Janaki Ram, G. D./Mohd Arif, I. A.

Grain refinement of Ti-15V-3Cr-3Sn-3Al metastable β titanium alloy welds using boron-modified fillers. J. Alloys Compd. 2018, 749, 320–328. ▲

Arabi-Hashemi, A./Guo, Y./Michler, J./Casari, D./Leinenbach, C./Maeder, X.

Stress induced martensite variants revealed by in situ high resolution electron backscatter diffraction (HR-EBSD). Mater. Des. 2018, 151, 83–88. (joint paper) ▲

Arabi-Hashemi, A./Lee, W. J./Leinenbach, C.

Recovery stress formation in FeMnSi based shape memory alloys: impact of precipitates, texture and grain size. Materials and Design 2018, 139, 258–268. ▲

Arnold, Keith/Tatlock, Gordon/Kenel, Christoph/Colella, Alberto/Matteazzi, Paolo.

High temperature isothermal oxidation behaviour of an oxide dispersion strengthened derivative of IN625. Materials at High Temperatures 2018, 35 (1–3), 141–150 ▲

Crisan, A. D./Vasilii, F./Nicula, R./Bartha, C./Mercioniu, I./Crisan, O.

Thermodynamic, structural and magnetic studies of phase transformations in MnAl nanocomposite alloys. Mater. Charact. 2018, 140, 1–8. ▲

Croteau, J. R./Griffiths, S./Rossell, M. D./Leinenbach, C./Kenel, C./Jansen, V./Seidman, D. N./Dunand, D. C./Vo, N. Q.

Microstructure and mechanical properties of Al-Mg-Zr alloys processed by selective laser melting. Acta Mater. 2018, 153, 35–44. (joint paper) ▲

Darham, W./Talari, M. K./Anis, A. L./Babu, N. K.

Impression creep of Mg-1.5Ca and Mg-3.0Ca alloys. Journal Eng. Appl. Sciences 2016, 11 (12), 2573–2576.

Gong, J./Violakis, G./Infante, D./Hoffmann, P./Kostro, A./Schüler, A.

Microfabrication of curved sidewall grooves using scanning nanosecond excimer laser ablation. In Laser-based micro- and nanoprocessing XII, presented at the SPIE Lase, San Francisco, California, January 27–February 1, 2018/Klotzbach, U., Washio, K., Kling, R., Eds./Proceedings of SPIE/SPIE: Bellingham, Washington, 2018/Vol. 10520, p 105200Z (8 pp.).

Griffiths, S./Rossell, M. D./Croteau, J./Vo, N. Q./Dunand, D. C./Leinenbach, C.

Effect of laser rescanning on the grain microstructure of a selective laser melted Al-Mg-Zr alloy. Mater. Charact. 2018, 143, 34–42. (joint paper) ▲

Hammoud, H./Valdivieso, F./Vaucher, S.

Multiphysics modelling approach to microwave heating of cerium oxide particles in diverse packing situations. *IET Sci. Meas. Technol.* 2018, 12 (7), 838–843. ▲

Hosseini, E./Ghafoori, E./Leinenbach, C./Motavalli, M./Holdsworth, S. R.

Stress recovery and cyclic behaviour of an Fe–Mn–Si shape memory alloy after multiple thermal activation. *Smart Mater. Struct.* 2018, 27 (2), 025009 (10 pp.). (joint paper) ▲

Le Dantec, Marie/Abdulstaar, Mustafa/Leistner, Matthias/Leparoux, Marc/Hoffmann, Patrik

Additive manufacturing of semiconductor silicon on silicon using direct laser melting. In Meboldt, M./Klahn, C. (Eds.), *Industrializing additive manufacturing – proceedings of additive manufacturing in products and applications – AMPA2017* (pp. 104–116).

Leparoux, M./Kollo, L./Kwon, H./Kallip, K./Babu, N. K./AlOgab, K./Talari, M. K.

Solid state processing of aluminum matrix composites reinforced with nanoparticulate materials. *Adv. Eng. Mater.* 2018, 20 (11), 1800401 (18 pp.). ▲

Le-Quang, T./Shevchik, S. A./Meylan, B./Vakili-Farahani, F./Olbinado, M. P./Rack, A./Wasmer, K.

Why is in situ quality control of laser keyhole welding a real challenge? In 10th CIRP conference on photonic technologies [LANE 2018], presented at the 10th CIRP conference on photonic technologies [LANE 2018], Fürth, Germany, September 03–06, 2018/Schmidt, M., Vollertsen, F., Dearden, G., Eds./Procedia CIRP/Elsevier, 2018/Vol. 74, pp 649–653.

Li, X./Ivas, T./Spierings, A. B./Wegener, K./Leinenbach, C.

Phase and microstructure formation in rapidly solidified Cu–Sn and Cu–Sn–Ti alloys. *J. Alloys Compd.* 2018, 735, 1374–1382. ▲

Meylan, B./Saeidi, F./Wasmer, K.

Effect of surface texturing on cast iron reciprocating against steel under cyclic loading in boundary and mixed lubrication conditions. *Lubricants* 2018, 6 (1), 2 (13 pp.). ▲

Mohanta, A./Jang, D. J./Lu, S. K./Ling, D. C./Wang, J. S./Chen, R. B./Chuang, F. C.

Carrier recombination dynamics in electronically coupled multi-layer InAs/GaAs quantum dots. *J. Lumin.* 2018, 195, 109–115. ▲

Rowthu, S./Hoffmann, P.

Perfluoropolyether-impregnated mesoporous alumina composites overcome the dewetting-tribological properties trade-off. *ACS Appl. Mater. Interfaces* 2018, 10 (12), 10560–10570. ▲

Rowthu, S./Saeidi, F./Wasmer, K./Hoffmann, P./Kuebler, J.

Flexural strength evaluations and fractography analyses of slip cast mesoporous submicron alumina. *Ceram. Int.* 2018, 44 (5), 5193–5201. (joint paper) ▲

Shevchik, S. A./Kenel, C./Leinenbach, C./Wasmer, K.

Acoustic emission for in situ quality monitoring in additive manufacturing using spectral convolutional neural networks. *Addit. manuf.* 2018, 21, 598–604.

Shevchik, S. A./Meylan, B./Mosaddeghi, A./Wasmer, K.

Acoustic emission for in situ monitoring of solid materials pre-weakening by electric discharge: a machine learning approach. *IEEE Access* 2018, 6, 40313–40324. ▲

Shevchik, S./Le, Q. T./Meylan, B./Wasmer, K.

Acoustic Emission for in situ monitoring of laser processing. In Conference proceedings Ewgae 2018, presented at the 33rd European conference on acoustic emission testing (EWGAE), Senlis, France, September 12–14, 2018/CETIM: Senlis, 2018/p (9 pp.).

Tang, Y./Li, X./Martin, L. H. J./Cuervo Reyes, E./Ivas, T./Leinenbach, C./Anand, S./Peters, M./Snyder, G. J./Battaglia, C.

Impact of Ni content on the thermoelectric properties of half-Heusler TiNiSn. *Energy Environ. Sci.* 2018, 11 (2), 311–320. (joint paper) ▲

Vaucher, S./Yakovlev, V. V./Yeung, H.

Materials with required dielectric properties: computational development and production of polymer-ceramic composites. *Polym. Eng. Sci.* 2017, 58 (3), 319–326. ▲

Wasmer, K.

High-speed X-ray imaging for correlating acoustic signals with quality monitoring: a machine learning approach. In *Contributed Papers from Materials Science & Technology 2018*, presented at the Materials science & technology 2018 (MS&T18), Columbus, Ohio USA, October 14–18, 2018/2018/pp 165–168.

Wasmer, K./Le, T. Q./Meylan, B./Vakili-Farahani, F./Leinenbach, C./Olbinado, M. P./Rack, A./Shevchik, S. A.

AM/LW process monitoring combining high-speed X-ray imaging, acoustic & optical sensors and artificial intelligence. Presented at the ESRF user meeting 2018, Grenoble, France, February 5–7, 2018.

Wasmer, K./Le-Quang, T./Meylan, B./Vakili-Farahani, F./Olbinado, M. P./Rack, A./Shevchik, S. A.

Laser processing quality monitoring by combining acoustic emission and machine learning: a high-speed X-ray imaging approach. In 10th CIRP conference on photonic technologies [LANE 2018], presented at the 10th CIRP conference on photonic technologies [LANE 2018], Fürth, Germany, September 03–06, 2018/Schmidt, M., Vollertsen, F., Dearden, G., Eds./Procedia CIRP/Elsevier, 2018/Vol. 74, pp 654–658.

Wasmer, K./Saeidi, F./Meylan, B./Le, Q. T./Shevchik, S. A.

When AE (acoustic emission) meets AI (artificial intelligence) II. In Conference proceedings Ewgae 2018, presented at the 33rd European conference on acoustic emission testing (EWGAE), Senlis, France, September 12–14, 2018/CETIM: Senlis, 2018/p (12 pp.).

Wasmer, K./Kenel, C./Leinenbach, C./Shevchik, S.A.

In situ and real-time monitoring of powder-bed AM by combining acoustic emission and artificial intelligence. In Mebold, Mirko/Klahn, Christoph (Eds.), *Industrializing additive manufacturing – proceedings of additive manufacturing in products and applications – AMPA2017, 2018* (pp. 200–209).

Zhang, B./Meylan, B./Wasmer, K./Cucho, E.

A new ball-on-disk vacuum tribometer with in situ measurement of the wear track by digital holographic microscopy. In *Proceedings of Asia international conference on tribology 2018*, presented at the ASIATRIB 2018. The 6th Asia international conference on tribology, Sarawak, Malaysia, September 17–20, 2018/Abdollah, M. F. B., Ed./Malaysian Tribology Society: Kuala Lumpur, 2018/pp 109–110.

Albani, M./Marzegalli, A./Bergamaschini, R./Mauceri, M./Crippa, D./La Via, F./Von Känel, H./Miglio, L.

Solving the critical thermal bowing in 3C-SiC/Si(111) by a tilting Si pillar architecture. *J. Appl. Phys.* 2018, 123 (18), 185703 (9 pp.). ▲

Avancini, E./Keller, D./Carron, R./Arroyo-Rojas Dasilva, Y./Erni, R./Priebe, A./Di Napoli, S./Carrisi, M./Sozzi, G./Menozzi, R./et al.

Voids and compositional inhomogeneities in Cu(In,Ga)Se₂ thin films: evolution during growth and impact on solar cell performance. *Sci. Technol. Adv. Mater.* 2018, 19 (1), 871–882. (joint paper) ▲

Bologna, N./Agrawal, P./Campanini, M./Knödler, M./Rossell, M. D./Erni, R./Passerone, D.

Stair-rod dislocation cores acting as one-dimensional charge channels in GaAs nanowires. *Phys. Rev. Mater.* 2018, 2 (1), 014603 (6 pp.). (joint paper) ▲

Bologna, N./Wirths, S./Francaviglia, L./Campanini, M./Schmid, H./Theofylaktopoulos, V./Moselund, K. E./Fontcuberta i Morral, A./Erni, R./Riel, H./et al.

Dopant-induced modifications of Ga_xIn_(1-x)P nanowire-based p–n junctions monolithically integrated on Si(111). *ACS Appl. Mater. Interfaces* 2018, 10 (38), 32588–32596. ▲

Campanini, M./Erni, R./Yang, C. H./Ramesh, R./Rossell, M. D.

Periodic giant polarization gradients in doped BiFeO₃ thin films. *Nano Lett.* 2018, 18 (2), 717–724. ▲

Caparrós, F. J./Soler, L./Rossell, M. D./Angurell, I./Piccolo, L./Rossell, O./Llorca, J.

Remarkable carbon dioxide hydrogenation to ethanol on a palladium/iron oxide single-atom catalyst. *Chem-CatChem* 2018, 10 (11), 2365–2369. ▲

Croteau, J. R./Griffiths, S./Rossell, M. D./Leinenbach, C./Kenel, C./Jansen, V./Seidman, D. N./Dunand, D. C./Vo, N. Q.

Microstructure and mechanical properties of Al-Mg-Zr alloys processed by selective laser melting. *Acta Mater.* 2018, 153, 35–44. (joint paper) ▲

Griffiths, S./Rossell, M. D./Croteau, J./Vo, N. Q./Dunand, D. C./Leinenbach, C.

Effect of laser rescanning on the grain microstructure of a selective laser melted Al-Mg-Zr alloy. *Mater. Charact.* 2018, 143, 34–42. (joint paper) ▲

Guntlin, C. P./Ochsenbein, S. T./Wörle, M./Erni, R./Kravchyk, K. V./Kovalenko, M. V.

Popcorn-shaped Fe₃O₄ (Wüstite) nanoparticles from a single-source precursor: colloidal synthesis and magnetic properties. *Chem. Mater.* 2018, 30 (4), 1249–1256. (joint paper) ▲

Guo, J. W./Wang, P. S./Yuan, Y./He, Q./Lu, J. L./Chen, T. Z./Yang, S. Z./Wang, Y. J./Erni, R./Rossell, M. D./et al.

Strain-induced ferroelectricity and spin-lattice coupling in SrMnO₃ thin films. *Phys. Rev. B* 2018, 97 (23), 235135 (8 pp.). ▲

Iswar, S./Snellings, G. M. B. F./Zhao, S./Erni, R./Bahk, Y. K./Wang, J./Lattuada, M./Koebel, M. M./Malfait, W. J.

Reinforced and superinsulating silica aerogel through in situ cross-linking with silane terminated prepolymers. *Acta Mater.* 2018, 147, 322–328. (joint paper) ▲

Jung, A./Zhang, Y./Arroyo Rojas Dasilva, Y./Isa, F./von Känel, H.

Electrical properties of Si-Si interfaces obtained by room temperature covalent wafer bonding. *J. Appl. Phys.* 2018, 123 (8), 085701 (5 pp.). ▲

Kaur, N./Zappa, D./Ferroni, M./Poli, N./Campanini, M./Negrea, R./Comini, E.

Branch-like NiO/ZnO heterostructures for VOC sensing. *Sens. Actuators B* 2018, 262, 477–485. ▲

Kozak, R./Prieto, I./Arroyo Rojas Dasilva, Y./Erni, R./von Känel, H./Bona, G. L./Rossell, M. D.

A comparative study of defect formation in GaAs nanocrystals selectively grown on nanopatterned and flat Si(001) substrates. *Micron* 2018, 113, 83–90. (joint paper) ▲

Liati, A./Schreiber, D./Arroyo Rojas Dasilva, Y./Dimopoulos Eggenschwiler, P.

Ultrafine particle emissions from modern gasoline and diesel vehicles: an electron microscopic perspective. *Environ. Pollut.* 2018, 239, 661–669. (joint paper) ▲

Meduňa, M./Falub, C. V./Isa, F./von Känel, H.

Growth temperature dependent strain in relaxed Ge microcrystals. *Thin Solid Films* 2018, 664, 115–123. ▲

Meduňa, M./Isa, F./Jung, A./Marzegalli, A./Albani, M./Isella, G./Zweiacker, K./Miglio, L./von Känel, H.

Lattice tilt and strain mapped by X-ray scanning nanodiffraction in compositionally graded SiGe/Si microcrystals. *J. Appl. Crystallogr.* 2018, 51 (2), 368–385. (joint paper) ▲

Merriam, T./Kaufmann, R./Ebert, L./Figi, R./Erni, R./Pauer, R./Sieberth, T.

Differentiation of dental restorative materials combining energy-dispersive X-ray fluorescence spectroscopy and post-mortem CT. *Forensic Sci. Med. Pathol.* 2018, 14 (2), 163–173. (joint paper) ▲

Montalenti, F./Rovaris, F./Bergamaschini, R./Miglio, L./Salvalaglio, M./Isella, G./Isa, F./von Känel, H.

Dislocation-free SiGe/Si heterostructures. *Crystals* 2018, 8 (6), 257 (16 pp.). ▲

- Oldenburg, F. J./Bon, M./Perego, D./Polino, D./Laino, T./Gubler, L./Schmidt, T. J.**
Revealing the role of phosphoric acid in all-vanadium redox flow batteries with DFT calculations and in situ analysis. *Phys. Chem. Chem. Phys.* 2018, 20 (36), 23664–23673. ▲
- Rovaris, F./Isa, F./Gatti, R./Jung, A./Isella, G./Montalenti, F./von Känel, H.**
Three-dimensional SiGe/Si heterostructures: switching the dislocation sign by substrate under-etching. *Phys. Rev. Mater.* 2017, 1 (7), 073602 (8 pp.). ▲
- Sambalova, O./Thorwarth, K./Heeb, N. V./Bleiner, D./Zhang, Y./Borgschulte, A./Kroll, A.**
Carboxylate functional groups mediate interaction with silver nanoparticles in biofilm matrix. *ACS Omega* 2018, 3 (1), 724–733. (joint paper) ▲
- Varisco, M./Zufferey, D./Ruggi, A./Zhang, Y./Erni, R./Mamula, O.**
Synthesis of hydrophilic and hydrophobic carbon quantum dots from waste of wine fermentation. *R. Soc. Open Sci.* 2017, 4 (12), 170900 (11 pp.). ▲
- Venturi, F./Campanini, M./Gazzadi, G. C./Balboni, R./Frabboni, S./Boyd, R. W./Dunin-Borkowski, R. E./Karimi, E./Grillo, V.**
Phase retrieval of an electron vortex beam using diffraction holography. *Appl. Phys. Lett.* 2017, 111 (22), 223101 (5 pp.). ▲
- Bouidoire, F./Partel, S./Toth, R./Heier, J.**
Combining parallel pattern generation of electrohydrodynamic lithography with serial addressing. *RSC Adv.* 2018, 8 (54), 30932–30936. (joint paper) ▲
- Burankova, T./Roedern, E./Maniadaki, A. E./Hagemann, H./Rentsch, D./Łodziana, Z./Battaglia, C./Remhof, A./Embs, J. P.**
Dynamics of the coordination complexes in a solid-state Mg electrolyte. *J. Phys. Chem. Lett.* 2018, 9 (22), 6450–6455. (joint paper) ▲
- Burda, I./Baechler, C./Gardin, S./Verma, A./Terrasi, G. P./Kovacs, G.**
Low-cost scalable printing of carbon nanotube electrodes on elastomeric substrates: towards the industrial production of EAP transducers. *Sens. Actuators A* 2018, 279, 712–724. (joint paper) ▲
- Caspari, P./Dünki, S. J./Nüesch, F. A./Opris, D. M.**
Dielectric elastomer actuators with increased dielectric permittivity and low leakage current capable of suppressing electromechanical instability. *J. Mater. Chem. C* 2018, 6 (8), 2043–2053. ▲
- Devizis, A./Jenatsch, S./Diethelm, M./Gulbinas, V./Nüesch, F./Hany, R.**
Dynamics of charge distribution in sandwich-type light-emitting electrochemical cells probed by the stark effect. *ACS Photonics* 2018, 5 (8), 3124–3131. ▲
- Diethelm, M./Penninck, L./Altazin, S./Hiestand, R./Kirsch, C./Ruhstaller, B.**
Quantitative analysis of pixel crosstalk in AMOLED displays. *J. Inf. Disp.* 2018, 19 (2), 61–69.
- Gesevičius, Donatas/Neels, Antonia/Jenatsch, Sandra/Hack, Erwin/Viani, Lucas/Athanasopoulos, Stavros/Nüesch, Frank/Heier, Jakob**
Increasing photovoltaic performance of an organic cationic chromophore by anion exchange. *Advanced Science* 2018, 1700496 (9 pp.). (joint paper) ▲
- Jankowska, D./Heck, T./Schubert, M./Yerlikaya, A./Weymuth, C./Rentsch, D./Schober, I./Richter, M.**
Enzymatic synthesis of lignin-based concrete dispersing agents. *ChemBioChem* 2018, 19 (13), 1365–1369. (joint paper) ▲
- Jenatsch, S./Regnat, M./Hany, R./Diethelm, M./Nüesch, F./Ruhstaller, B.**
Time-dependent p–i–n structure and emission zone in sandwich-type light-emitting electrochemical cells. *ACS Photonics* 2018, 5 (4), 1591–1598. ▲
- Kawecki, M./Hany, R./Diethelm, M./Jenatsch, S./Grossmann, Q./Bernard, L./Hug, H. J.**
Direct measurement of ion redistribution and resulting modification of chemical equilibria in polymer thin film light-emitting electrochemical cells. *ACS Appl. Mater. Interfaces* 2018, 10 (45), 39100–39106. (joint paper) ▲
- Leclaire, N. A./Li, M./Véron, A. C./Neels, A./Heier, J./Reimers, J. R./Nüesch, F. A.**
Cyanine platelet single crystals: growth, crystal structure and optical spectra. *Phys. Chem. Chem. Phys.* 2018, 20 (46), 29166–29173. (joint paper) ▲
- Mairena, A./Parschau, M./Seibel, J./Wienke, M./Rentsch, D./Terfort, A./Ernst, K. H.**
Diastereoselective self-assembly of bisheptahelicene on Cu(111). *Chem. Commun.* 2018, 54 (63), 8757–8760. (joint paper) ▲
- Makha, M./Schwaller, P./Strassel, K./Anantharaman, S. B./Nüesch, F./Hany, R./Heier, J.**
Insights into photovoltaic properties of ternary organic solar cells from phase diagrams. *Sci. Technol. Adv. Mater.* 2018, 19 (1), 669–682. ▲
- Marberger, Adrian/Ferri, Davide/Rentsch, Daniel/Krumeich, Frank/Elsener, Martin/Kröcher, Oliver**
Effect of SiO₂ on co-impregnated V₂O₅/WO₃/TiO₂ catalysts for the selective catalytic reduction of NO with NH₃. *Catalysis Today* 2019, 320, 123–132 ▲
- Mertgen, A. S./Yazgan, G./Guex, A. G./Fortunato, G./Müller, E./Huber, L./Schneider, R./Brunelli, M./Rossi, R. M./Maniura-Weber, K./et al.**
Controlling the surface structure of electrospun fibers: effect on endothelial cells and blood coagulation. *Bioin-terph.: J. Biomater. Biolog. Interfac.* 2018, 13 (5), 051001 (10 pp.). (joint paper) ▲
- Opris, Dorina M.**
Polar elastomers as novel materials for electromechanical actuator applications. *Advanced Materials* 2018, 30 (5), 1703678 (23 pp.). ▲

- Perju, E./Cuervo-Reyes, E./Shova, S./Opris, D. M.**
Synthesis of novel cyclosiloxane monomers containing push-pull moieties and their anionic ring opening polymerization. *RSC Adv.* 2018, 8 (14), 7569–7578. (joint paper) ▲
- Przystas, A./Jovic, M./Salmeia, K. A./Rentsch, D./Ferry, L./Mispreuve, H./Perler, H./Gaan, S.**
Some key factors influencing the flame retardancy of EDA-DOPO containing flexible polyurethane foams. *Polymers* 2018, 10 (10), 1115 (15 pp.). (joint paper) ▲
- Rifaie-Graham, O./Ulrich, S./Galensowske, N. F. B./Balog, S./Chami, M./Rentsch, D./Hemmer, J. R./Read de Alaniz, J./Boesel, L. F./Bruns, N.**
Wavelength-selective light-responsive DASA-functionalized polymersome nanoreactors. *J. Am. Chem. Soc.* 2018, 140 (25), 8027–8036. (joint paper) ▲
- Salimian, S./Zadhoush, A./Talebi, Z./Fischer, B./Winiger, P./Winnefeld, F./Zhao, S./Barbezat, M./Koebel, M. M./Malfait, W. J.**
Silica aerogel–epoxy nanocomposites: understanding epoxy reinforcement in terms of aerogel surface chemistry and epoxy–silica interface compatibility. *ACS Appl. Nano Mater.* 2018, 1 (8), 4179–4189. (joint paper)
- Salmeia, K. A./Flaig, F./Rentsch, D./Gaan, S.**
One-pot synthesis of P(O)-N containing compounds using N-chlorosuccinimide and their influence in thermal decomposition of PU foams. *Polymers* 2018, 10 (7), 740 (16 pp.). (joint paper) ▲
- Shettigar, Madhura/Balotra, Sahil/Cahill, David/Warden, Andrew C./Lacey, Michael J./Kohler, Hans-Peter E./Rentsch, Daniel/Oakeshott, John G./Pandey, Gunjan**
Isolation of the (+)-pinosresinol-mineralizing *Pseudomonas* sp. strain SG-MS2 and elucidation of its catabolic pathway. *Applied and Environmental Microbiology* 2018, 84 (4), e02531-17 (14 pp.). ▲
- Strassel, K./Kaiser, A./Jenatsch, S./Véron, A. C./Anantharaman, S. B./Hack, E./Diethelm, M./Nüesch, F./Aderne, R./Legnani, C./et al.**
Squaraine dye for a visibly transparent all-organic optical upconversion device with sensitivity at 1000 nm. *ACS Appl. Mater. Interfaces* 2018, 10 (13), 11063–11069. (joint paper) ▲
- Véron, A. C./Linden, A./Leclaire, N. A./Roedern, E./Hu, S./Ren, W./Rentsch, D./Nüesch, F. A.**
One-dimensional organic–inorganic hybrid perovskite incorporating near-infrared-absorbing cyanine cations. *J. Phys. Chem. Lett.* 2018, 9 (9), 2438–2442. (joint paper) ▲
- Wang, L./Jenatsch, S./Ruhstaller, B./Hinderling, C./Gesevičius, D./Hany, R./Nüesch, F.**
Organic salt semiconductor with high photoconductivity and long carrier lifetime. *Adv. Funct. Mater.* 2018, 28 (16), 1705724 (8 pp.). ▲
- Wang, Jieping/Chiappone, Annalisa/Roppolo, Ignazio/Shao, Feng/Fantino, Erika/Lorusso, Massimo/Rentsch, Daniel/Dietliker, Kurt/Pirri, Candido Fabrizio/Grützmaier, Hansjörg**
All-in-One cellulose nanocrystals for 3D printing of nanocomposite hydrogels. *Angewandte Chemie International Edition* 2018, 57 (9), 2353–2356 ▲
- Yan, Y./Wang, H./Zhu, M./Cai, W./Rentsch, D./Remhof, A.**
Direct rehydrogenation of LiBH₄ from H-deficient Li₂B₁₂H₁₂-x. *Crystals* 2018, 8 (3), 131 (7 pp.). (joint paper) ▲
- Albani, D./Shahrokhi, M./Chen, Z./Mitchell, S./Hauert, R./López, N./Pérez-Ramírez, J.**
Selective ensembles in supported palladium sulfide nanoparticles for alkyne semi-hydrogenation. *Nat. Commun.* 2018, 9 (1), 2634 (11 pp.). ▲
- Arabi-Hashemi, A./Guo, Y./Michler, J./Casari, D./Leinenbach, C./Maeder, X.**
Stress induced martensite variants revealed by in situ high resolution electron backscatter diffraction (HR-EBSD). *Mater. Des.* 2018, 151, 83–88. (joint paper) ▲
- Ariosa, D./Cancellieri, C./Araullo-Peters, V./Chiodi, M./Klyatskina, E./Janczak-Rusch, J./Jeurgens, L.**
P. H. Modeling of interface and internal disorder applied to XRD analysis of Ag-based nano-multilayers. *ACS Appl. Mater. Interfaces* 2018, 10 (24), 20938–20949. ▲
- Cancellieri, C./Klyatskina, E./Chiodi, M./Janczak-Rusch, J./Jeurgens, L.**
The effect of interfacial Ge and RF-Bias on the microstructure and stress evolution upon annealing of Ag/AlN multilayers. *Appl. Sci.* 2018, 8 (12), 2403 (13 pp.). ▲
- Cancellieri, Claudia/Strocov, Vladimir N.**
Spectroscopy of complex oxide interfaces. Photoemission and related spectroscopies/ Cancellieri, C., Strocov, V. N., Eds./Springer series in materials science, Vol. 266/Springer: Cham, 2018/320 p.
- Chen, Z./Vorobyeva, E./Mitchell, S./Fako, E./López, N./Collins, S. M./Leary, R. K./Midgley, P. A./Hauert, R./Pérez-Ramírez, J.**
Single-atom heterogeneous catalysts based on distinct carbon nitride scaffolds. *NSR* 2018, 5 (5), 642–652. ▲
- Chikina, A./Lechermann, F./Husanu, M. A./Caputo, M./Cancellieri, C./Wang, X./Schmitt, T./Radovic, M./Strocov, V. N.**
Orbital ordering of the mobile and localized electrons at oxygen-deficient LaAlO₃/SrTiO₃ interfaces. *ACS Nano* 2018, 12 (8), 7927–7935. ▲
- Conti, L./Barnstedt, J./Hanke, L./Kalkuhl, C./Kappellmann, N./Rauch, T./Stelzer, B./Werner, K./Elsener, H. R./Schaadt, D. M.**
MCP detector development for UV space missions. *Astrophys. Space Sci.* 2018, 363 (4), 63 (8 pp.). ▲
- Gariglio, S./Cancellieri, C.**
The LaAlO₃/SrTiO₃ interface: the origin of the 2D electron liquid and the fabrication. In *Spectroscopy of complex oxide interfaces. Photoemission and related spectroscopies/Cancellieri, C., Strocov, V. N., Eds./Springer series in materials science, Vol. 266/Springer: Cham, 2018/pp 17–35.*

- González-Castaño, M./Döbeli, M./Araullo-Peters, V./Jeurgens, L. P. H./Schmutz, P./Cancellieri, C.**
Substrate purity effect on the defect formation and properties of amorphous anodic barrier Al₂O₃. *J. Electrochem. Soc.* 2018, 165 (7), C422-C431. ▲
- Lasi, D./Tulej, M./Neuland, M. B./Wurz, P./Carzaniga, T. S./Nesteruk, K. P./Braccini, S./Elsener, H. R.**
Testing the radiation hardness of thick-film resistors for a time-of-flight mass spectrometer at Jupiter with 18 MeV protons. In 2017 IEEE radiation effects data workshop (REDW), presented at the 2017 IEEE radiation effects data workshop (REDW), New Orleans, LA, USA, July 17–21, 2017/IEEE, 2017/p 8115474 (9 pp.).
- Lin, Ronghe/Kaiser, Selina K./Hauert, Roland/Pérez-Ramírez, Javier**
Descriptors for high-performance nitrogen-doped carbon catalysts in acetylene hydrochlorination. *ACS Catalysis* 2018, 8 (2), 1114–1121 ▲
- Luk, H. T./Mondelli, C./Mitchell, S./Siol, S./Stewart, J. A./Curulla Ferré, D./Pérez-Ramírez, J.**
Role of carbonaceous supports and potassium promoter on higher alcohols synthesis over copper-iron catalysts. *ACS Catal.* 2018, 8 (10), 9604–9618. ▲
- Luk, Ho Ting/Forster, Tim/Mondelli, Cecilia/Siol, Sebastian/Curulla-Ferré, Daniel/Stewart, Joseph A./Pérez-Ramírez, Javier**
Carbon nanofibres-supported KCoMo catalysts for syngas conversion into higher alcohols. *Catalysis Science and Technology* 2018, 8 (1) 187–200 ▲
- Mitchell, Sharon/Martín, Antonio J./Scholder, Olivier/Verel, René/Hauert, Roland/Bernard, Laetitia/Jensen, Christopher/Schwefer, Meinhard/Pérez-Ramírez, Javier**
Elucidating the distribution and speciation of boron and cesium in BCsX zeolite catalysts for styrene production. *ChemPhysChem.* 2018, 19 (4) 437–445 (joint paper) ▲
- Molnár, D./Török, T. N./Sánta, B./Gubicza, A./Magyarkuti, A./Hauert, R./Kiss, G./Halbritter, A./Csontos, M.**
In-situ impedance matching in Nb/Nb₂O₅/PtIr memristive nanojunctions for ultra-fast neuromorphic operation. *Nanoscale* 2018, 10 (41), 19290–19296. (joint paper) ▲
- Natzke, P./Grossner, U./Janczak-Rusch, J./Jeurgens, L.**
Thin layer Ag-Sn transient liquid phase bonding using magnetron sputtering for chip to baseplate bonding. In 2017 IEEE 5th workshop on wide bandgap power devices and applications (WiPDA), presented at the 2017 IEEE 5th workshop on wide bandgap power devices and applications (WiPDA), Albuquerque, NM, USA, October 30 – November 1, 2017/IEEE, 2017/pp 165–170.
- Panzarasa, G./Osypova, A./Sicher, A./Bruinink, A./Dufresne, E. R.**
Controlled formation of chitosan particles by a clock reaction. *Soft Matter* 2018, 14 (31), 6415–6418. (joint paper) ▲
- Paunović, V./Artusi, M./Verel, R./Krumeich, F./Hauert, R./Pérez-Ramírez, J.**
Lanthanum vanadate catalysts for selective and stable methane oxybromination. *J. Catal.* 2018, 363, 69–80. ▲
- Paunović, Vladimir/Zichittella, Guido/Mitchell, Sharon/Hauert, Roland/Pérez-Ramírez, Javier**
Selective methane oxybromination over nanostructured ceria catalysts. *ACS Catalysis* 2018, 8, 291–303. ▲
- Rheingans, B./Furrer, R./Neuenschwander, J./Spies, I./Schumacher, A./Knappmann, S./Jeurgens, L. P. H./Janczak-Rusch, J.**
Reactive joining of thermally and mechanically sensitive materials. 2018, 140 (4), 041006 (8 pp.). (joint paper) ▲
- Schwarting, M./Siol, S./Talley, K./Zakutayev, A./Phillips, C.**
Automated algorithms for band gap analysis from optical absorption spectra. *Mater. Discov.* 2017, 10, 43–52.
- Sévery, L./Siol, S./Tilley, S. D.**
Design of molecular water oxidation catalysts stabilized by ultrathin inorganic overlayers – is active site protection necessary? *Inorganics* 2018, 6 (4), 105.
- Siol, S./Han, Y./Mangum, J./Schulz, P./Holder, A. M./Klein, T. R./van Hest, M. F. A. M./Gorman, B./Zakutayev, A.**
Stabilization of wide band-gap p-type wurtzite MnTe thin films on amorphous substrates. *J. Mater. Chem. C* 2018, 6 (23), 6297–6304. ▲
- Siol, S./Holder, A./Steffes, J./Schelhas, L. T./Stone, K. H./Garten, L./Perkins, J. D./Parilla, P. A./Toney, M. F./Huey, B. D./et al.**
Negative-pressure polymorphs made by heterostructural alloying. *Sci. Adv.* 2018, 4 (4), eaaq1442 (7 pp.). ▲
- Spies, I./Schumacher, A./Knappmann, S./Dehé, A./Rheingans, B./Furrer, R./Neuenschwander, J./Janczak-Rusch, J./Jeurgens, L. P. H.**
Reactive joining of sensitive materials for MEMS devices: characterization of joint quality. In Proceedings smart systems integration 2018. International conference & exhibition on integration issues of miniaturized systems-MEMS, NEMS, ICs and electronic components, presented at the Smart systems integration (SSI), Dresden, April 11–12, 2018/Fraunhofer Institute for Electronic Nano Systems: Dresden, 2018/p (6 pp.). (joint paper)
- Spies, I./Schumacher, A./Knappmann, S./Rheingans, B./Janczak-Rusch, J./Jeurgens, L. P. H.**
Acceleration measurements during reactive bonding processes. Presented at the EMPC 2017 – 21st European microelectronics packaging conference, Warsaw, Poland, September 10–13, 2017/IMAPS/p (6 pp.).
- Sprecher, C. M./Milz, S./Suter, T./Keating, J. H./McCarthy, R. J./Gueorguiev, B./Boudrieau, R. J.**
Retrospective analysis of corrosion and ion release from retrieved cast stainless steel tibia plateau leveling osteotomy plates in dogs with and without peri-implant osteosarcoma. *Am. J. Vet. Res.* 2018, 79 (9), 970–979. ▲
- Strocov, V. N./Cancellieri, C./Mishchenko, A. S.**
Electrons and polarons at oxide interfaces explored by soft-x-ray ARPES. In Spectroscopy of complex oxide interfaces. Photoemission and related spectroscopies/Cancellieri, C., Strocov, V. N., Eds./Springer series in materials science, Vol. 266/Springer: Cham, 2018/pp 107–151.

Talley, K. R./Millican, S. L./Mangum, J./Siol, S./Musgrave, C. B./Gorman, B./Holder, A. M./Zakutayev, A./Brennecke, G. L.
Implications of heterostructural alloying for enhanced piezoelectric performance of (Al,Sc)N. *Phys. Rev. Mater.* 2018, 2 (6), 063802 (11 pp.). ▲

Zichittella, Guido/Puértolas, Begoña/Siol, Sebastian/Paunović, Vladimir/Mitchell, Sharon/Pérez-Ramírez, Javier
Activated TiC-SiC composite for natural gas upgrading via catalytic oxyhalogenation. *ChemCatChem* 2018, 10 (6), 1282–1290 ▲

Antonin, O./Schoeppner, R./Gabureac, M./Pethö, L./Michler, J./Raynaud, P./Nelis, T.
Nano crystalline diamond microwave chemical vapor deposition growth on three dimension structured silicon substrates at low temperature. *Diam. Relat. Mater.* 2018, 83, 67–74. ▲

Arabi-Hashemi, A./Guo, Y./Michler, J./Casari, D./Leinenbach, C./Maeder, X.
Stress induced martensite variants revealed by in situ high resolution electron backscatter diffraction (HR-EBSD). *Mater. Des.* 2018, 151, 83–88. (joint paper) ▲

Ast, J./Kalácska, S./Schwiedrzik, J./Polyakov, M./Michler, J./Maeder, X.
The use of (3D) HR-EBSD to investigate the brittle to ductile transition in single crystal tungsten. Presented at the Gordon research conference on thin film and small scale mechanical behavior, Lewiston, USA, July 15–20, 2018.

Ast, J./Schwiedrzik, J. J./Wehrs, J./Frey, D./Polyakov, M. N./Michler, J./Maeder, X.
The brittle-ductile transition of tungsten single crystals at the micro-scale. *Mater. Des.* 2018, 152, 168–180. ▲

Ast, J./Schwiedrzik, J./Pethö, L./Maeder, X./Michler, J.
Investigation of the microscale fracture behaviour of GaAs single crystals for mode I, II and III loading. Presented at the Gordon research conference on thin film and small scale mechanical behavior, Lewiston, USA, July 15–20, 2018.

Ast, J./N. Polyakov, M./Mohanty, G./Michler, J./Maeder, X. (2018).
Interplay of stresses, plasticity at crack tips and small sample dimensions revealed by in-situ microcantilever tests in tungsten. *Materials Science and Engineering A: Structural Materials: Properties*, 710, 400–412. ▲

Avancini, E./Keller, D./Carron, R./Arroyo-Rojas Dasilva, Y./Erni, R./Priebe, A./Di Napoli, S./Carrisi, M./Sozzi, G./Menozi, R./et al.
Voids and compositional inhomogeneities in Cu(In,Ga)Se₂ thin films: evolution during growth and impact on solar cell performance. *Sci. Technol. Adv. Mater.* 2018, 19 (1), 871–882. (joint paper) ▲

Berger, L./Madajska, K./Szymanska, I. B./Höflich, K./Polyakov, M. N./Jurczyk, J./Guerra-Núñez, C./Utke, I.
Gas-assisted silver deposition with a focused electron beam. *Beilstein J. Nanotechnol.* 2018, 9 (1), 224–232. ▲

Bertero, E./Hasegawa, M./Staubli, S./Pellicer, E./Herrmann, I. K./Sort, J./Michler, J./Philippe, L.
Electrodeposition of amorphous Fe-Cr-Ni stainless steel alloy with high corrosion resistance, low cytotoxicity and soft magnetic properties. *Surf. Coat. Technol.* 2018, 349, 745–751. (joint paper) ▲

Best, J. P./Polyakov, M./Shinde, D./Hörnqvist Colliander, M./Wehrs, J./Michler, J./Morstein, M.
Ni nanocluster composites for enhanced impact resistance of multilayered arc-PVD ceramic coatings. *Surf. Coat. Technol.* 2018, 354, 360–368. ▲

Best, James P./Guillonneau, Gaylord/Grop, Serge/Taylor, Aidan A./Frey, Damian/Longchamp, Quentin/Schär, Tobias/Morstein, Marcus/Breguet, Jean-Marc/Michler, Johann
High temperature impact testing of a thin hard coating using a novel high-frequency in situ micromechanical device. *Surface and Coatings Technology* 2018, 333, 178–186. ▲

Cadot, G. B. J./Thomas, K./Best, J. P./Taylor, A. A./Michler, J./Axinte, D. A./Billingham, J.
Investigation of the microstructure change due to phase transition in nanosecond pulsed laser processing of diamond. *Carbon* 2018, 127, 349–365. ▲

Casari, D./Pethö, L./Schürch, P./Brönnimann, R./Philippe, L./Michler, J./Zysset, P./Schwiedrzik, J.
Tensile properties of bone extracellular matrix at the microscale. Presented at the WCB 2018: 8th world congress of biomechanics, Dublin, Ireland, July 8–12, 2018. (joint paper)

Casari, D./Pethö, L./Schürch, P./Philippe, L./Michler, J./Zysset, P./Schwiedrzik, J.
Design and validation of a testing setup to measure tensile properties of materials at the microscale. Presented at the 2nd EuFN workshop 2018, Grenoble, France, June 19–20, 2018.

Desmond, P./Best, J. P./Morgenroth, E./Derlon, N.
Linking composition of extracellular polymeric substances (EPS) to the physical structure and hydraulic resistance of membrane biofilms. *Water Res.* 2018, 132, 211–221. ▲

Drost, M./Tu, F./Berger, L./Preischi, C./Zhou, W./Gliemann, H./Wöll, C./Marbach, H.
Surface-anchored metal-organic frameworks as versatile resists for gas-assisted e-beam lithography: fabrication of sub-10 nanometer structures. *ACS Nano* 2018, 12 (4), 3825–3835. ▲

Edwards, T. E. J./Di Gioacchino, F./Goodfellow, A. J./Mohanty, G./Wehrs, J./Michler, J./Clegg, W. J.
Deformation of lamellar γ -TiAl below the general yield stress. Presented at the Indentation 2018, Liège, Belgium, September 11–14, 2018.

Edwards, T. E. J./Di Gioacchino, F./Mohanty, G./Wehrs, J./Michler, J./Clegg, W. J.
Analysis of longitudinal twinning in γ -TiAl by microcompression up to 700 °C with strain and crystal orientation mapping. Presented at the Gordon research conference on thin film and small scale mechanical behavior, Lewiston, USA, July 15–20, 2018.

Edwards, T. E./Di Gioacchino, F./Mohanty, G./Wehrs, J./Michler, J./Clegg, W. J.
Longitudinal twinning in a TiAl alloy at high temperature by in situ microcompression. *Acta Mater.* 2018, 148, 202–215. ▲

- Fanicchia, F./Maeder, X./Ast, J./Taylor, A. A./Guo, Y./Polyakov, M. N./Michler, J./Axinte, D. A.**
Residual stress and adhesion of thermal spray coatings: microscopic view by solidification and crystallisation analysis in the epitaxial CoNiCrAlY single splat. *Mater. Des.* 2018, 153, 36–46. ▲
- Guillonneau, G./Mieszala, M./Wehrs, J./Schwiedrzik, J./Grop, S./Frey, D./Philippe, L./Breguet, J. M./Michler, J./Wheeler, J. M.**
Nanomechanical testing at high strain rates: new instrumentation for nanoindentation and microcompression. *Mater. Des.* 2018, 148, 39–48. ▲
- Haverkamp, C./Sarau, G./Polyakov, M. N./Utke, I./Puydinger dos Santos, M. V./Christiansen, S./Höflich, K.**
A novel copper precursor for electron beam induced deposition. *Beilstein J. Nanotechnol.* 2018, 9 (1), 1220–1227. ▲
- Höflich, K./Jurczyk, J. M./Madajska, K./Götz, M./Berger, L./Guerra-Nuñez, C./Haverkamp, C./Szymanska, I./Utke, I.**
Towards the third dimension in direct electron beam writing of silver. *Beilstein J. Nanotechnol.* 2018, 9, 842–849. ▲
- Jurczyk, J./Brewer, C./Hawkins, O./Polyakov, M./Kapusta, C./McElwee-White, L./Utke, I.**
Purification of Ru structures created by focused electron beam induced deposition. Presented at the 1st ELENA conference, Warsaw, Poland, September 29 – October 2, 2018.
- Lauener, C. M./Petho, L./Chen, M./Xiao, Y./Michler, J./Wheeler, J. M.**
Fracture of silicon: influence of rate, positioning accuracy, FIB machining, and elevated temperatures on toughness measured by pillar indentation splitting. *Mater. Des.* 2018, 142, 340–349. ▲
- Li, H./Papadakis, R./Jafri, S. H. M./Thersleff, T./Michler, J./Ottoosson, H./Leifer, K.**
Superior adhesion of graphene nanoscrolls. *Commun. Phys.* 2018, 1, 44 (7 pp.).
- Liao, Z./Axinte, D./Mieszala, M./M'Saoubi, R./Abelhafeez, A./Michler, J./Hardy, M.**
On the influence of gamma prime upon machining of advanced nickel based superalloy. *CIRP Ann. Manuf. Tech.* 2018, 67 (1), 109–112. ▲
- Lignos, I./Protesescu, L./Emiroglu, D. B./MacEiczak, R./Schneider, S./Kovalenko, M. V./DeMello, A. J.**
Unveiling the shape evolution and halide-ion-segregation in blue-emitting formamidinium lead halide perovskite nanocrystals using an automated microfluidic platform. *Nano Lett.* 2018, 18 (2), 1246–1252. (joint paper) ▲
- Manzano, C. V./Abad, B./Martín-González, M.**
The effect of electrolyte impurities on the thermoelectric properties of electrodeposited Bi₂Te₃ films. *J. Electrochem. Soc.* 2018, 165 (14), D768–D773. ▲
- Manzano, C. V./Ramos, D./Pethö, L./Bürki, G./Michler, J./Philippe, L.**
Controlling the color and effective refractive index of metal-anodic aluminum oxide (AAO)-Al nanostructures: morphology of AAO. *J. Phys. Chem. C* 2018, 122 (1), 957–963. ▲
- Mendis, B.G./Taylor, A.A./Guennou, M./Berg, D.M./Arasimowicz, M./Ahmed, S./Deligianni, H./Dale, P.J.**
Nanometre-scale optical property fluctuations in Cu₂ZnSnS₄ revealed by low temperature cathodoluminescence. *Solar Energy Materials and Solar Cells* 2018, 174, 65–76. ▲
- Montinaro, E./Grisi, M./Letizia, M. C./Pethö, L./Gijs, M. A. M./Guidetti, R./Michler, J./Brugger, J./Boero, G.**
3D printed microchannels for sub-nL NMR spectroscopy. *PLoS One* 2018, 13 (5), e0192780 (17 pp.). ▲
- Pethö, L./Antonin, O./Schoeppner, R./Gabureac, M./Rats, D./Nelis, T./Michler, J.**
Low temperature nano-crystalline diamond growth on high aspect ratio silicon structures. Presented at the 19th CMi annual review meeting, Lausanne, May 8, 2018.
- Pethö, L./Casari, D./Schürch, P./Michler, J./Zysset, P./Schwiedrzik, J.**
In situ microtensile testing using custom fabricated silicon grippers. Presented at the 19th CMi annual review meeting, Lausanne, May 8, 2018.
- Petho, L./Chen, M./Lauener, C. M./Michler, J./Wheeler, J. M.**
In-situ mechanical testing of microfabricated micro/nanopillars. Presented at the 19th CMi annual review meeting, Lausanne, May 8, 2018.
- Pethö, L./Polyakov, M./Schoeppner, R./Thomas, K./Könnyü, B./Maeder, X./Michler, J.**
Increasing the thermal stability of thin films by incorporating co-sputtered nanoparticles. Presented at the 16th international conference on plasma surface engineering, Garmisch-Partenkirchen, Germany, September 17–21, 2018.
- Pethö, L./Schoeppner, R./Taylor, A./Schwiedrzik, J./Mohanty, G./Chawla, V./Thomas, K./Könnyü, B./Ipach, R./Zechner, J./et al.**
Combinatorial deposition techniques enabling fundamental nanomechanic investigations. Presented at the Swiss nano convention, Basel, June 30 – July 1, 2018.
- Pethö, L./Schürch, P./Mieszala, M./Schwiedrzik, J./Wheeler, J./Philippe, L./Michler, J.**
Towards lightweight materials: Micromechanical test specimen preparation by 2D and 3D microfabrication techniques. Presented at the SWII – additive manufacturing & lightweight technologies 2018, Dübendorf, September 25, 2018.
- Priebe, A./Avancini, E./Sastre Pellicer, J./Bücheler, S./Michler, J.**
Application of FIB-TOF-SIMS technique for elemental characterization of new thin film energy devices. Presented at the 2nd EuFN workshop 2018, Grenoble, France, June 19–20, 2018. (joint paper)

- Puydinger dos Santos, M. V./Szkudlarek, A./Rydosz, A./Guerra-Nuñez, C./Béron, F./Pirota, K. R./Moshkalev, S./Diniz, J. A./Utke, I.**
Comparative study of post-growth annealing of Cu(hfac)₂, Co₂(CO)₈ and Me₂Au(acac) metal precursors deposited by FEBID. *Beilstein J. Nanotechnol.* 2018, 9, 91–101. ▲
- Ramachandramoorthy, R./Schwiedrzik, J./Petho, L./Frey, D./Bregaut, J. M./Michler, J.**
Anomalous plasticity in amorphous silica micropillars tested at high strain rates. Presented at the Gordon research conference on thin film and small scale mechanical behavior, Lewiston, USA, July 15–20, 2018.
- Ruoho, M./Tarasiuk, N./Rohbeck, N./Kapusta, C./Michler, J./Utke, I.**
Stability of mechanical properties of molecular layer-deposited alucone. *Mater. Today Chem.* 2018, 10, 187–194.
- Schoeppner, R. L./Taylor, A. A./Cordill, M. J./Zbib, H. M./Michler, J./Bahr, D. F.**
Precipitate strengthening and thermal stability in three component metallic nanolaminate thin films. *Mater. Sci. Eng. A* 2018, 712, 485–492. ▲
- Schürch, P./Pethö, L./Schwiedrzik, J./Michler, J./Philippe, L.**
Electrodeposition of 3D nickel microcomponents: simulation assisted synthesis. Presented at the COMSOL conference 2018, Lausanne, Switzerland, October 22–24, 2018.
- Schwiedrzik, J. J./Ast, J./Pethö, L./Maeder, X./Michler, J.**
A new push-pull sample design for microscale mode I fracture toughness measurements under uniaxial tension. *Fatigue Fract. Eng. Mater. Struct.* 2018, 41 (5), 991–1001. ▲
- Schwiedrzik, J./Casari, D./Pethö, L./Taylor, A./Wolfram, U./Zysset, P. K./Michler, J.**
Anisotropic micromechanical properties and deformation mechanisms of bone extracellular matrix in tension and compression. Presented at the Gordon research conference on thin film and small scale mechanical behavior, Lewiston, USA, July 15–20, 2018.
- Thiebaud, L./Legeai, S./Ghanbaja, J./Stein, N.**
Synthesis of Te-Bi core-shell nanowires by two-step electrodeposition in ionic liquids. *Electrochem. Commun.* 2018, 86, 30–33. ▲
- Tumbajoy-Spinel, D./Maeder, X./Guillonneau, G./Sao-Joao, S./Descartes, S./Bergheau, J. M./Langlade, C./Michler, J./Kermouche, G.**
Microstructural and micromechanical investigations of surface strengthening mechanisms induced by repeated impacts on pure iron. *Mater. Des.* 2018, 147, 56–64. ▲
- Waheed, S./Hao, R./Zheng, Z./Wheeler, J. M./Michler, J./Balint, D. S./Giuliani, F.**
Temperature-dependent plastic hysteresis in highly confined polycrystalline Nb films. *Model. Simul. Mater. Sci. Eng.* 2018, 26 (2), 025005 (18 pp.). ▲
- Bologna, N./Agrawal, P./Campanini, M./Knödler, M./Rossell, M. D./Erni, R./Passerone, D.**
Stair-rod dislocation cores acting as one-dimensional charge channels in GaAs nanowires. *Phys. Rev. Mater.* 2018, 2 (1), 014603 (6 pp.). **(joint paper)** ▲
- Buchs, G./Bercieux, D./Mayrhofer, L./Gröning, O.**
Confined electron and hole states in semiconducting carbon nanotube sub-10 nm artificial quantum dots. *Carbon* 2018, 132, 304–311. ▲
- Deniz, O./Sánchez-Sánchez, C./Jaafar, R./Kharche, N./Liang, L./Meunier, V./Feng, X./Müllen, K./Fasel, R./Ruffieux, P.**
Electronic characterization of silicon intercalated chevron graphene nanoribbons on Au(111). *Chem. Commun.* 2018, 54 (13), 1619–1622. ▲
- Denk, R./Lodi-Rizzini, A./Wang, S./Hohage, M./Zeppenfeld, P./Cai, J./Fasel, R./Ruffieux, P./Berger, R. F. J./Chen, Z./et al.**
Probing optical excitations in chevron-like armchair graphene nanoribbons. *Nanoscale* 2017, 9 (46), 18326–18333. ▲
- Di Giovannantonio, M./Contini, G.**
Reversibility and intermediate steps as key tools for the growth of extended ordered polymers via on-surface synthesis. *J. Phys. Condens. Matter* 2018, 30 (9), 093001 (22 pp.). ▲
- Di Giovannantonio, M./Deniz, O./Urgel, J. I./Widmer, R./Dienel, T./Stolz, S./Sánchez-Sánchez, C./Muntwiler, M./Dumslaff, T./Berger, R./et al.**
On-surface growth dynamics of graphene nanoribbons: the role of halogen functionalization. *ACS Nano* 2018, 12 (1), 74–81. ▲
- Di Giovannantonio, M./Urgel, J. I./Beser, U./Yakutovich, A. V./Wilhelm, J./Pignedoli, C. A./Ruffieux, P./Narita, A./Müllen, K./Fasel, R.**
On-surface synthesis of indenofluorene polymers by oxidative five-membered ring formation. *J. Am. Chem. Soc.* 2018, 140 (10), 3532–3536. ▲
- Eltés, F./Kroh, M./Caimi, D./Mai, C./Popoff, Y./Winzer, G./Petousi, D./Lischke, S./Ortmann, J. E./Czornomaz, L./et al.**
A novel 25 Gbps electro-optic Pockels modulator integrated on an advanced Si photonic platform. In 2017 IEEE international electron devices meeting (IEDM), presented at the 2017 IEEE international electron devices meeting (IEDM), San Francisco, CA, USA, December 2–6, 2017/IEEE, 2017/pp 24.5.1–24.5.4.
- Gröning, O./Wang, S./Yao, X./Pignedoli, C. A./Barin, G. B./Daniels, C./Cupo, A./Meunier, V./Feng, X./Narita, A./et al.**
Engineering of robust topological quantum phases in graphene nanoribbons. *Nature* 2018, 560 (7717), 209–213. ▲

- Liu, J./Wang, S./Kravchyk, K./Ibáñez, M./Krumeich, F./Widmer, R./Nasiou, D./Meyns, M./Llorca, J./Arbiol, J./et al.**
SnP nanocrystals as anode materials for Na-ion batteries. *J. Mater. Chem. A* 2018, 6 (23), 10958–10966. (joint paper) ▲
- Mishra, S./Krzyszewski, M./Pignedoli, C. A./Ruffieux, P./Fasel, R./Gryko, D. T.**
On-surface synthesis of a nitrogen-embedded buckyball with inverse Stone-Thrower-Wales topology. *Nat. Commun.* 2018, 9 (1), 1714. ▲
- Passerone, D.**
Grown with the wind. *Nat. Mater.* 2018, 17 (4), 296–297. ▲
- Pisoni, S./Fu, F./Widmer, R./Carron, R./Moser, T./Groening, O./Tiwari, A. N./Buecheler, S.**
Impact of interlayer application on band bending for improved electron extraction for efficient flexible perovskite mini-modules. *Nano Energy* 2018, 49, 300–307. (joint paper) ▲
- Sánchez-Sánchez, C./Nicolai, A./Rossel, F./Cai, J./Liu, J./Feng, X./Müllen, K./Ruffieux, P./Fasel, R./Meunier, V.**
On-surface cyclization of ortho-Dihalotetracenes to four- and six-membered rings. *J. Am. Chem. Soc.* 2017, 139 (48), 17617–17623. ▲
- Ueba, H./Passerone, D./Parschau, M./Ernst, K. H.**
Action spectra associated with inelastic two-electron tunneling through a single molecule: propene on Cu(211). *Surf. Sci.* 2018, 678, 206–214. (joint paper) ▲
- Walter, M./Doswald, S./Krumeich, F./He, M./Widmer, R./Stadie, N. P./Kovalenko, M. V.**
Oxidized Co–Sn nanoparticles as long-lasting anode materials for lithium-ion batteries. *Nanoscale* 2018, 10 (8), 3777–3783. (joint paper) ▲
- Walter, M./Kravchyk, K. V./Böfer, C./Widmer, R./Kovalenko, M. V.**
Polypyrenes as high-performance cathode materials for aluminum batteries. *Adv. Mater.* 2018, 30 (15), 1705644 (6 pp.). (joint paper) ▲
- Wang, X. Y./Urgel, J. I./Barin, G. B./Eimre, K./Di Giovannantonio, M./Milani, A./Tommasini, M./Pignedoli, C. A./Ruffieux, P./Feng, X./et al.**
Bottom-up synthesis of heteroatom-doped chiral graphene nanoribbons. *J. Am. Chem. Soc.* 2018, 140 (29), 9104–9107. ▲
- Wilhelm, J./Golze, D./Talirz, L./Hutter, J./Pignedoli, C. A.**
Toward GW calculations on thousands of atoms. *J. Phys. Chem. Lett.* 2018, 9 (2), 306–312. ▲
- Yakutovich, A. V./Hoja, J./Passerone, D./Tkatchenko, A./Pignedoli, C. A.**
Hidden beneath the surface: origin of the observed enantioselective adsorption on PdGa(111). *J. Am. Chem. Soc.* 2018, 140 (4), 1401–1408. ▲
- Akkerman, Q. A./Rainò, G./Kovalenko, M. V./Manna, L.**
Genesis, challenges and opportunities for colloidal lead halide perovskite nanocrystals. *Nat. Mater.* 2018, 17, 394–405. ▲
- Andres, C./Cabas-Vidani, A./Tiwari, A. N./Romanyuk, Y. E.**
From sputtered metal precursors towards Cu₂Zn(Sn_{1-x}Gex)Se₄ thin film solar cells with shallow back grading. *Thin Solid Films* 2018, 665, 168–172. ▲
- Andres, C./Schwarz, T./Haass, S. G./Weiss, T. P./Carron, R./Caballero, R./Figi, R./Schreiner, C./Bürki, M./Tiwari, A. N./et al.**
Decoupling of optoelectronic properties from morphological changes in sodium treated kesterite thin film solar cells. *Sol. Energy* 2018, 175, 94–100. (joint paper) ▲
- Avancini, E./Keller, D./Carron, R./Arroyo-Rojas Dasilva, Y./Erni, R./Priebe, A./Di Napoli, S./Carrisi, M./Sozzi, G./Menozzi, R./et al.**
Voids and compositional inhomogeneities in Cu(In,Ga)Se₂ thin films: evolution during growth and impact on solar cell performance. *Sci. Technol. Adv. Mater.* 2018, 19 (1), 871–882. (joint paper) ▲
- Balazs, D./Matysiak, B. M./Momand, J./Shulga, A. G./Ibáñez, M./Kovalenko, M. V./Kooi, B. J./Loi, M. A.**
Electron mobility of 24 cm² V⁻¹ s⁻¹ in PbSe colloidal-quantum-dot superlattices. *Adv. Mater.* 2018, 30 (38), 1802265 (9 pp.). ▲
- Balazs, D. M./Bijlsma, K. I./Fang, H. H./Dirin, D. N./Döbeli, M./Kovalenko, M. V./Loi, M. A.**
Stoichiometric control of the density of states in PbS colloidal quantum dot solids. *Sci. Adv.* 2017, 3 (9), eaao1558 (7 pp.). ▲
- Balazs, D. M./Rizkia, N./Fang, H. H./Dirin, D. N./Momand, J./Kooi, B. J./Kovalenko, M. V./Loi, M. A.**
Colloidal quantum dot inks for single-step-fabricated field-effect transistors: the importance of postdeposition ligand removal. *ACS Appl. Mater. Interfaces* 2018, 10 (6), 5626–5632. ▲
- Balena, A./Perulli, A./Fernandez, M./De Giorgi, M. L./Nedelcu, G./Kovalenko, M. V./Anni, M.**
Temperature dependence of the amplified spontaneous emission from CsPbBr₃ nanocrystal thin films. *J. Phys. Chem. C* 2018, 122 (10), 5813–5819. ▲
- Becker, M. A./Vaxenburg, R./Nedelcu, G./Sercel, P. C./Shabaev, A./Mehl, M. J./Michopoulos, J. G./Lambarakos, S. G./Bernstein, N./Lyons, J. L./et al.**
Bright triplet excitons in caesium lead halide perovskites. *Nature* 2018, 553 (7687), 189–193. ▲
- Benin, B. M./Dirin, D. N./Morad, V./Wörle, M./Yakunin, S./Rainò, G./Nazarenko, O./Fischer, M./Infante, I./Kovalenko, M. V.**
Highly emissive self-trapped excitons in fully inorganic zero-dimensional tin halides. *Angew. Chem. Int. Ed.* 2018, 57 (35), 11329–11333. ▲

- Berestok, T./Guardia, P./Ibáñez, M./Meyns, M./Colombo, M./Kovalenko, M. V./Peiró, F./Cabot, A.**
Electrostatic-driven gelation of colloidal nanocrystals. *Langmuir* 2018, 34 (31), 9167–9174. ▲
- Bertolotti, F./Proppe, A. H./Dirin, D. N./Liu, M./Voznyy, O./Cervellino, A./Billinge, S. J. L./Kovalenko, M. V./Sargent, E. H./Masciocchi, N./et al.**
Ligand-induced symmetry breaking, size and morphology in colloidal lead sulfide QDs: from classic to thiourea precursors. *Chem. Squared* 2018, 2 (1), 1–14. ▲
- Bezinge, L./Maceiczkyk, R. M./Lignos, I./Kovalenko, M. V./deMello, A. J.**
Pick a color MARIA: adaptive sampling enables the rapid identification of complex perovskite nanocrystal compositions with defined emission characteristics. *ACS Appl. Mater. Interfaces* 2018, 10 (22), 18869–18878. ▲
- Billeter, E./McGlamery, D./Aebli, M./Piveteau, L./Kovalenko, M. V./Stadie, N. P.**
Bulk phosphorus-doped graphitic carbon. *Chem. Mater.* 2018, 30 (14), 4580–4589. ▲
- Bissig, B./Carron, R./Greuter, L./Nishiwaki, S./Avancini, E./Andres, C./Feurer, T./Buecheler, S./Tiwari, A. N.**
Novel back contact reflector for high efficiency and double-graded Cu(In,Ga)Se₂ thin-film solar cells. *Prog. Photovolt.* 2018, 26 (11), 894–900. ▲
- Brumberg, A./Diroll, B. T./Nedelcu, G./Sykes, M. E./Liu, Y./Harvey, S. M./Wasielowski, M. R./Kovalenko, M. V./Schaller, R. D.**
Material dimensionality effects on electron transfer rates between CsPbBr₃ and CdSe nanoparticles. *Nano Lett.* 2018, 18 (8), 4771–4776. ▲
- Caballero, R./Haass, S. G./Andres, C./Arques, L./Oliva, F./Izquierdo-Roca, V./Romanyuk, Y. E.**
Effect of magnesium incorporation on solution-processed kesterite solar cells. *Front. Chem.* 2018, 6, 5 (9 pp.). ▲
- Cabas-Vidani, A./Haass, S. G./Andres, C./Caballero, R./Figli, R./Schreiner, C./Márquez, J. A./Hages, C./U-nold, T./Bleiner, D./et al.**
High-efficiency (Li_xCu_{1-x})₂ZnSn(S,Se)₄ kesterite solar cells with lithium alloying. *Adv. Energy Mater.* 2018, 8 (34), 1801191 (8 pp.). (joint paper) ▲
- Carron, R./Avancini, E./Feurer, T./Bissig, B./Losio, P. A./Figli, R./Schreiner, C./Bürki, M./Bourgeois, E./Remes, Z./et al.**
Refractive indices of layers and optical simulations of Cu(In,Ga)Se₂ solar cells. *Sci. Technol. Adv. Mater.* 2018, 19 (1), 396–410. (joint paper) ▲
- Feurer, T./Bissig, B./Weiss, T. P./Carron, R./Avancini, E./Löckinger, J./Buecheler, S./Tiwari, A. N.**
Single-graded CIGS with narrow bandgap for tandem solar cells. *Sci. Technol. Adv. Mater.* 2018, 19 (1), 263–270. ▲
- Fu, F./Pisoni, S./Weiss, T. P./Feurer, T./Wäckerlin, A./Fuchs, P./Nishiwaki, S./Zortea, L./Tiwari, A. N./Buecheler, S.**
Compositionally graded absorber for efficient and stable near-infrared-transparent perovskite solar cells. *Adv. Sci.* 2018, 5 (3), 1700675 (11 pp.). ▲
- Fu, M./Tamarat, P./Trebbia, J. B./Bodnarchuk, M. I./Kovalenko, M. V./Even, J./Lounis, B.**
Unraveling exciton–phonon coupling in individual FAPbI₃ nanocrystals emitting near-infrared single photons. *Nat. Commun.* 2018, 9 (1), 3318 (10 pp.). ▲
- Guntlin, C. P./Ochsenbein, S. T./Wörle, M./Erni, R./Kravchyk, K. V./Kovalenko, M. V.**
Popcorn-shaped Fe₃O₄ (Wüstite) nanoparticles from a single-source precursor: colloidal synthesis and magnetic properties. *Chem. Mater.* 2018, 30 (4), 1249–1256. (joint paper) ▲
- Guo, H./Büchel, M./Li, X./Wäckerlin, A./Chen, Q./Burgert, I.**
Dictating anisotropic electric conductivity of a transparent copper nanowire coating by the surface structure of wood. *J. R. Soc. Interface* 2018, 15 (142), 20170864 (9 pp.). (joint paper) ▲
- Haass, S. G./Andres, C./Figli, R./Schreiner, C./Bürki, M./Tiwari, A. N./Romanyuk, Y. E.**
Effects of potassium on kesterite solar cells: similarities, differences and synergies with sodium. *AIP Adv.* 2018, 8 (1), 015133 (11 pp.). (joint paper) ▲
- Haass, Stefan G./Andres, Christian/Figli, Renato/Schreiner, Claudia/Bürki, Melanie/Romanyuk, Yaroslav E./Tiwari, Ayodhya N.**
Complex interplay between absorber composition and alkali doping in high-efficiency kesterite solar cells. *Advanced Energy Materials* 2018, 8 (4) (joint paper) ▲
- Jagielski, J./Kumar, S./Wang, M./Scullion, D./Lawrence, R./Li, Y. T./Yakunin, S./Tian, T./Kovalenko, M. V./Chiu, Y. C./et al.**
Aggregation-induced emission in lamellar solids of colloidal perovskite quantum wells. *Sci. Adv.* 2017, 3 (12), eaq0208 (11 pp.). ▲
- Kravchyk, K. V./Bhauriyal, P./Piveteau, L./Guntlin, C. P./Pathak, B./Kovalenko, M. V.**
High-energy-density dual-ion battery for stationary storage of electricity using concentrated potassium fluorosulfonylimide. *Nat. Commun.* 2018, 9, 4469 (9 pp.). ▲
- Kravchyk, K. V./Piveteau, L./Caputo, R./He, M./Stadie, N. P./Bodnarchuk, M. I./Lechner, R. T./Kovalenko, M. V.**
Colloidal bismuth Nanocrystals as a model anode material for rechargeable Mg-ion batteries: atomistic and mesoscale insights. *ACS Nano* 2018, 12 (8), 8297–8307. ▲
- Kravchyk, K. V./Zünd, T./Wörle, M./Kovalenko, M. V./Bodnarchuk, M. I.**
NaFeF₃ nanoplates as low-cost sodium and lithium cathode materials for stationary energy storage. *Chem. Mater.* 2018, 30 (6), 1825–1829. ▲

- Krieg, F./Ochsenbein, S. T./Yakunin, S./ten Brinck, S./Aellen, P./Süess, A./Clerc, B./Guggisberg, D./Nazarenko, O./Shynkarenko, Y./et al.**
Colloidal CsPbX₃ (X = Cl, Br, I) nanocrystals 2.0: zwitterionic capping ligands for improved durability and stability. *ACS Energy Lett.* 2018, 3 (3), 641–646. ▲
- Kumar, S./Surati, K. R./Lawrence, R./Vamja, A. C./Yakunin, S./Kovalenko, M. V./Santos, E. J. G./Shih, C. J.**
Design and synthesis of heteroleptic iridium(III) phosphors for efficient organic light-emitting devices. *Inorg. Chem.* 2017, 56 (24), 15304–15313. ▲
- Lignos, I./Morad, V./Shynkarenko, Y./Bernasconi, C./Maceiczky, R. M./Protesescu, L./Bertolotti, F./Kumar, S./Ochsenbein, S. T./Masciocchi, N./et al.**
Exploration of near-infrared-emissive colloidal multinary lead halide perovskite nanocrystals using an automated microfluidic platform. *ACS Nano* 2018, 12 (6), 5504–5517. ▲
- Lignos, I./Protesescu, L./Emiroglu, D. B./MacEiczky, R./Schneider, S./Kovalenko, M. V./DeMello, A. J.**
Unveiling the shape evolution and halide-ion-segregation in blue-emitting formamidinium lead halide perovskite nanocrystals using an automated microfluidic platform. *Nano Lett.* 2018, 18 (2), 1246–1252. (joint paper) ▲
- Lin, T. Y./Filippin, A./Rawlence, M./Zünd, T./Kravchyk, K./Sastre-Pellicer, J./Haass, S. G./Wäckerlin, A./Kovalenko, M. V./Buecheler, S.**
Ni-Al-Cr superalloy as high temperature cathode current collector for advanced thin film Li batteries. *RSC Adv.* 2018, 8 (36), 20304–20313. ▲
- Lingg, M./Spescha, A./Haass, S. G./Carron, R./Buecheler, S./Tiwari, A. N.**
Structural and electronic properties of CdTe_{1-x}Sex films and their application in solar cells. *Sci. Technol. Adv. Mater.* 2018, 19 (1), 683–692. ▲
- Liu, J./Wang, S./Kravchyk, K./Ibáñez, M./Krumeich, F./Widmer, R./Nasiou, D./Meyns, M./Llorca, J./Arbiol, J./et al.**
SnP nanocrystals as anode materials for Na-ion batteries. *J. Mater. Chem. A* 2018, 6 (23), 10958–10966. (joint paper) ▲
- Liu, Y./Zhang, Y./Lim, K. H./Ibáñez, M./Ortega, S./Li, M./David, J./Martí-Sánchez, S./Ng, K. M./Arbiol, J./et al.**
High thermoelectric performance in crystallographically textured n-type Bi₂Te_{3-x}Sex produced from asymmetric colloidal nanocrystals. *ACS Nano* 2018, 12 (7), 7174–7184. ▲
- Liu, Y./Zhang, Y./Ortega, S./Ibáñez, M./Lim, K. H./Grau-Carbonell, A./Martí-Sánchez, S./Ng, K. M./Arbiol, J./Kovalenko, M. V./et al.**
Crystallographically textured nanomaterials produced from the liquid phase sintering of Bi_xSb_{2-x}Te₃ nanocrystal building blocks. *Nano Lett.* 2018, 18 (4), 2557–2563. ▲
- Löckinger, Johannes/Nishiwaki, Shiro/Weiss, Thomas P./Bissig, Benjamin/Romanyuk, Yaroslav E./Buecheler, Stephan/Tiwari, Ayodhya N.**
TiO₂ as intermediate buffer layer in Cu(In,Ga)Se₂ solar cells. *Solar Energy Materials and Solar Cells* 2018, 174, 397–404. ▲
- Nafria, R./Luo, Z./Ibáñez, M./Martí-Sánchez, S./Yu, X./de La Mata, M./Llorca, J./Arbiol, J./Kovalenko, M. V./Grabulosa, A./et al.**
Growth of Au–Pd₂Sn nanorods via galvanic replacement and their catalytic performance on hydrogenation and Sonogashira coupling reactions. *Langmuir* 2018, 34 (36), 10634–10643. ▲
- Nazarenko, O./Kotyrba, M. R./Yakunin, S./Aebli, M./Rainò, G./Benin, B. M./Wörle, M./Kovalenko, M. V.**
Guanidinium-formamidinium lead iodide: a layered perovskite-related compound with red luminescence at room temperature. *J. Am. Chem. Soc.* 2018, 140 (11), 3850–3853. ▲
- Ozga, K./Yanchuk, O. M./Tsurkova, L. V./Marchuk, O. V./Urubkov, I. V./Romanyuk, Y. E./Fedorchuk, O./Lakshminarayana, G./Kityk, I. V.**
Operation by optoelectronic features of cadmium sulphide nanocrystallites embedded into the photopolymer polyvinyl alcohol matrices. *Appl. Surf. Sci.* 2018, 446, 209–214. ▲
- Papagiorgis, P./Manoli, A./Protesescu, L./Achilleos, C./Violaris, M./Nicolaidis, K./Trypiniotis, T./Bodnarchuk, M. I./Kovalenko, M. V./Othonos, A./et al.**
Efficient optical amplification in the nanosecond regime from formamidinium lead iodide nanocrystals. *ACS Photonics* 2018, 5 (3), 907–917. ▲
- Parvan, V./Mizrak, A./Majumdar, I./Ümsür, B./Calvet, W./Greiner, D./Kaufmann, C. A./Dittrich, T./Avancini, E./Lauermann, I.**
Cu(In,Ga)Se₂ surface treatment with Na and NaF: a combined photoelectron spectroscopy and surface photovoltage study in ultra-high vacuum. *Appl. Surf. Sci.* 2018, 444, 436–441. ▲
- Perulli, A./Balena, A./Fernandez, M./Nedelcu, G./Cretí, A./Kovalenko, M. V./Lomascolo, M./Anni, M.**
Full-color tuning in binary polymer:perovskite nanocrystals organic-inorganic hybrid blends. *Appl. Phys. Lett.* 2018, 112 (17), 171904 (5 pp.). ▲
- Pfingsten, O./Klein, J./Protesescu, L./Bodnarchuk, M. I./Kovalenko, M. V./Bacher, G.**
Phonon interaction and phase transition in single formamidinium lead bromide quantum dots. *Nano Lett.* 2018, 18 (7), 4440–4446. ▲
- Pisoni, S./Fu, F./Widmer, R./Carron, R./Moser, T./Groening, O./Tiwari, A. N./Buecheler, S.**
Impact of interlayer application on band bending for improved electron extraction for efficient flexible perovskite mini-modules. *Nano Energy* 2018, 49, 300–307. (joint paper) ▲

- Piveteau, L./Ong, T. C./Walder, B. J./Dirin, D. N./Moscheni, D./Schneider, B./Bär, J./Protesescu, L./Masciocchi, N./Guagliardi, A./et al.**
Resolving the core and the surface of CdSe quantum dots and nanoplatelets using dynamic nuclear polarization enhanced PASS-PIETA NMR spectroscopy. *ACS Cent. Sci.* 2018, 4 (9), 1113–1125. ▲
- Priebe, A./Avancini, E./Sastre Pellicer, J./Bücheler, S./Michler, J.**
Application of FIB-TOF-SIMS technique for elemental characterization of new thin film energy devices. Presented at the 2nd EuFN workshop 2018, Grenoble, France, June 19–20, 2018. (joint paper)
- Protesescu, L./Yakunin, S./Nazarenko, O./Dirin, D. N./Kovalenko, M. V.**
Low-cost synthesis of highly luminescent colloidal lead halide perovskite nanocrystals by wet ball milling. *ACS Appl. Nano Mater.* 2018, 1 (3), 1300–1308.
- Rainò, G./Becker, M. A./Bodnarchuk, M. I./Mahrt, R. F./Kovalenko, M. V./Stöferle, T.**
Superfluorescence from lead halide perovskite quantum dot superlattices. *Nature* 2018, 563 (7733), 671–675. ▲
- Rawlence, M. J. S.**
Synthesis and characterization of Li₇La₃Zr₂O₁₂ thin films for solid-state lithium ion batteries. Doctoral dissertation, ETH Zürich, Zürich, 2017, 101 p.
- Rawlence, M./Filippin, A. N./Wäckerlin, A./Lin, T. Y./Cuervo-Reyes, E./Remhof, A./Battaglia, C./Rupp, J. L. M./Buecheler, S.**
Effect of gallium substitution on lithium-ion conductivity and phase evolution in sputtered Li_{7-3x}Ga_xLa₃Zr₂O₁₂ thin films. *ACS Appl. Mater. Interfaces* 2018, 10 (16), 13720–13728. (joint paper) ▲
- Salazar-Rios, J. M./Sukharevska, N./Speirs, M. J./Jung, S./Dirin, D./Dragoman, R. M./Allard, S./Kovalenko, M. V./Scherf, U./Loi, M. A.**
Enhancing quantum dot solar cells stability with a semiconducting single-walled carbon nanotubes interlayer below the top anode. *Adv. Mater. Interfaces* 2018, 5 (22), 1801155 (6 pp.). ▲
- Strassel, K./Kaiser, A./Jenatsch, S./Véron, A. C./Anantharaman, S. B./Hack, E./Diethelm, M./Nüesch, F./Aderne, R./Legnani, C./et al.**
Squaraine dye for a visibly transparent all-organic optical upconversion device with sensitivity at 1000 nm. *ACS Appl. Mater. Interfaces* 2018, 10 (13), 11063–11069. (joint paper) ▲
- Uhl, A. R./Rajagopal, A./Clark, J. A./Murray, A./Feurer, T./Buecheler, S./Jen, A. K. Y./Hillhouse, Hugh W.**
Solution-processed low-bandgap CuIn(S,Se)₂ absorbers for high-efficiency single-junction and monolithic chalcopyrite-perovskite tandem solar cells. *Adv. Energy Mater.* 2018, 8 (27), 1801254 (8 pp.). ▲
- Vishwakarma, M./Varandani, D./Andres, C./Romanyuk, Y. E./Haass, S. G./Tiwari, A. N./Mehta, B. R.**
A direct measurement of higher photovoltage at grain boundaries in CdS/CZTSe solar cells using KPFM technique. *Sol. Energy Mater. Sol. Cells* 2018, 183, 34–40. ▲
- Walter, M./Doswald, S./Krumeich, F./He, M./Widmer, R./Stadie, N. P./Kovalenko, M. V.**
Oxidized Co–Sn nanoparticles as long-lasting anode materials for lithium-ion batteries. *Nanoscale* 2018, 10 (8), 3777–3783. (joint paper) ▲
- Walter, M./Kravchyk, K. V./Böfer, C./Widmer, R./Kovalenko, M. V.**
Polypyrenes as high-performance cathode materials for aluminum batteries. *Adv. Mater.* 2018, 30 (15), 1705644 (6 pp.). (joint paper) ▲
- Wang, S./He, M./Walter, M./Krumeich, F./Kravchyk, K. V./Kovalenko, M. V.**
Monodisperse CoSn₂ and FeSn₂ nanocrystals as high-performance anode materials for lithium-ion batteries. *Nanoscale* 2018, 10 (15), 6827–6831. ▲
- Wang, S./Kravchyk, K. V./Filippin, A. N./Müller, U./Tiwari, A. N./Buecheler, S./Bodnarchuk, M. I./Kovalenko, M. V.**
Aluminum chloride-graphite batteries with flexible current collectors prepared from earth-abundant elements. *Adv. Sci.* 2018, 5 (4), 1700712 (6 pp.). (joint paper) ▲
- Weiss, Thomas Paul/Nishiwaki, Shiro/Bissig, Benjamin/Carron, Romain/Avancini, Enrico/Löckinger, Johannes/Buecheler, Stephan/Tiwari, Ayodhya N.**
Injection current barrier formation for RbF postdeposition-treated Cu(In,Ga)Se₂-based solar cells. *Advanced Materials Interfaces* 2018, 5 (4), 1701007 (10 pp.). ▲
- Werner, F./Wolter, M. H./Siebentritt, S./Sozzi, G./Di Napoli, S./Menozzi, R./Jackson, P./Witte, W./Carron, R./Avancini, E./et al.**
Alkali treatments of Cu(In,Ga)Se₂ thin-film absorbers and their impact on transport barriers. *Prog. Photovolt.* 2018, 26 (11), 911–923. ▲
- Witte, W./Carron, R./Hariskos, D./Fu, F./Menner, R./Buecheler, S.**
IZO or IOH Window Layers Combined with Zn(O,S) and CdS Buffers for Cu(In,Ga)Se₂ Solar Cells. *Phys. Status Solidi A* 2017, 214 (12), 1700688 (6 pp.). ▲
- Wolter, M. H./Bissig, B./Avancini, E./Carron, R./Buecheler, S./Jackson, P./Siebentritt, S.**
Influence of sodium and rubidium postdeposition treatment on the quasi-Fermi level splitting of Cu(In,Ga)Se₂ thin films. *IEEE J. Photovolt.* 2018, 8 (5), 1320–1325. ▲
- Yang, Z./Pelton, M./Bodnarchuk, M. I./Kovalenko, M. V./Waks, E.**
Spontaneous emission enhancement of colloidal perovskite nanocrystals by a photonic crystal cavity. *Appl. Phys. Lett.* 2017, 111 (22), 221104 (4 pp.). ▲

Engineering Sciences

Luchsinger, R./Aregger, D./Bezard, F./Costa, D./Galliot, C./Gohl, F./Heilmann, J./Hesse, H./Houle, C./Wood, T. A./et al.

Pumping cycle kite power with twings. In Airborne wind energy. Advances in technology development and research/Schmehl, R., Ed./Green energy and technology/Springer: Singapore, 2018/pp 603–621.

Bachmann, B. J./Giampietro, C./Bayram, A./Stefopoulos, G./Michos, C./Graeber, G./Falk, M. V./Poulikakos, D./Ferrari, A.

Honeycomb-structured metasurfaces for the adaptive nesting of endothelial cells under hemodynamic loads. *Biomater. Sci.* 2018, 6 (10), 2726–2737. ▲

Bernardi, L./Giampietro, C./Marina, V./Genta, M./Mazza, E./Ferrari, A.

Adaptive reorientation of endothelial collectives in response to strain. *Integr. Biol.* 2018, 10 (9), 527–538. ▲

Bernardi, L./Mazza, E./Ehret, A. E.

The effect of clamping conditions on tearing energy estimation for highly stretchable materials. *Engineering Fracture Mechanics* 2018, 188, 300–308 ▲

Cavalli, M. C./Zaumanis, M./Mazza, E./Partl, M. N./Poulikakos, L. D.

Aging effect on rheology and cracking behaviour of reclaimed binder with bio-based rejuvenators. *J. Clean. Prod.* 2018, 189, 88–97. (joint paper) ▲

Cavalli, M. C./Zaumanis, M./Mazza, E./Partl, M. N./Poulikakos, L. D.

Effect of ageing on the mechanical and chemical properties of binder from RAP treated with bio-based rejuvenators. *Composites B* 2018, 141, 174–181. (joint paper) ▲

Chen, Zhen/Holdsworth, Stuart

High-R low growth rate fatigue crack propagation at elevated temperatures. *International Journal of Fatigue* 2018, 106, 114–122. ▲

Holdsworth, S./Simandjuntak, S./Shibli, A./Skelton, P.

Special issue of materials at high temperatures containing papers from the HIDA-7 conference. *Mater. High Temp.* 2017, 34 (5–6), 299–300. ▲

Hosseini, E./Ghafoori, E./Leinenbach, C./Motavalli, M./Holdsworth, S. R.

Stress recovery and cyclic behaviour of an Fe–Mn–Si shape memory alloy after multiple thermal activation. *Smart Mater. Struct.* 2018, 27 (2), 025009 (10 pp.). (joint paper) ▲

Hosseini, E./Holdsworth, S. R./Flueeler, U.

A temperature-dependent asymmetric constitutive model for cast irons under cyclic loading conditions. *J. Strain Anal. Eng. Des.* 2018, 53 (2), 106–114. ▲

Hosseini, E./Holdsworth, S./Mazza, E.

Advanced constitutive modelling for creep-fatigue assessment of high temperature components. *Mater. High Temp.* 2018, 35 (6), 504–512. ▲

Hosseini, E./Kalyanasundaram, V./Li, X./Holdsworth, S. R.

Effect of prior deformation on the subsequent creep and anelastic recovery behaviour of an advanced martensitic steel. *Mater. Sci. Eng. A* 2018, 717, 68–77. ▲

Morel, A./Domaschke, S./Urundolil Kumaran, V./Alexeev, D./Sadeghpour, A./Ramakrishna, S. N./Ferguson, S. J./Rossi, R. M./Mazza, E./Ehret, A. E./et al.

Correlating diameter, mechanical and structural properties of poly (L-lactide) fibres from needleless electrospinning. *Acta Biomater.* 2018, 81, 169–183. (joint paper) ▲

Müller, B./Elrod, J./Pensalfini, M./Hopf, R./Distler, O./Schiestl, C./Mazza, E.

A novel ultra-light suction device for mechanical characterization of skin. *PLoS One* 2018, 13 (8), e0201440 (22 pp.). ▲

Panagiotakopoulou, M./Lendenmann, T./Pramotton, F. M./Giampietro, C./Stefopoulos, G./Poulikakos, D./Ferrari, A.

Cell cycle-dependent force transmission in cancer cells. *Mol. Biol. Cell* 2018, 29 (21), 2528–2539. ▲

Pensalfini, M./Weickenmeier, J./Rominger, M./Santoprete, R./Distler, O./Mazza, E.

Location-specific mechanical response and morphology of facial soft tissues. *J. Mech. Behav. Biomed. Mater.* 2018, 78, 108–115. ▲

Pensalfini, M./Meneghello, S./Lintas, V./Bircher, K./Ehret, A. E./Mazza, E.

The suture retention test, revisited and revised. *Journal of the Mechanical Behavior of Biomedical Materials* 2018, 77, 711–717. ▲

Pensalfini, Marco/Haertel, Eric/Hopf, Raoul/Wietecha, Mateusz/Werner, Sabine/Mazza, Edoardo

The mechanical fingerprint of murine excisional wounds. *Acta Biomaterialia* 2018, 65, 226–236. ▲

Rubin, M. B./Ehret, A. E.

Invariants for rari- and multi-constant theories with generalization to anisotropy in biological tissues. *J. Elast.* 2018, 133 (1), 119–127. ▲

Affolter, Ch./Barbezat, M./Piskoty, G./Neuner, O./Terrasi, G.

Failure of a sag water pipe triggered by aging of the GFRP composite relining. *Engineering Failure Analysis*, 2018, 84, 358–370. ▲

Alderliesten, R. C./Brunner, A. J./Pascoe, J. A.

Cyclic fatigue fracture of composites: what has testing revealed about the physics of the processes so far? *Eng. Fract. Mech.* 2018, 203, 186–196. ▲

Baschnagel, F./Härdis, R./Triantafyllidis, Z./Meier, U./Terrasi, G. P.
Fatigue and durability of laminated carbon fibre reinforced polymer straps for bridge suspenders. *Polymers* 2018, 10 (2), 169 (14 pp.). (joint paper) ▲

Baschnagel, F./Terrasi, G. P./Triantafyllidis, Z./Meier, U.
Fatigue and durability of laminated carbon fibre reinforced polymer straps for bridge suspenders. In Proceedings of the ninth international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018), presented at the 9th international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018), Paris, France, July 17–19, 2018/2018/p (8 pp.). (joint paper)

Brunner, A. J.
Identification of damage mechanisms in fiber-reinforced polymer-matrix composites with acoustic emission and the challenge of assessing structural integrity and service-life. *Constr. Build. Mater.* 2018, 173, 629–637. ▲

Brunner, A. J.
Scatter, scope and structures: what fatigue fracture testing of fiber polymer composites is all about. In 39th Risø international symposium proceedings, presented at the 39th Risø international symposium on materials science 'fatigue of composite materials: microstructure, mechanics and methods', Roskilde, Denmark, September 3–6, 2018/Fæster, S., Goutianos, S., Lilholt, H., Madsen, B., Mikkelsen, L. P., Sørensen, B. F., Toftgaard, H. L., Eds./IOP conference series: materials science and engineering/IOP, 2018/Vol. 388, p 012003 (18 pp.).

Brunner, A. J./Clerc, G./Niemz, P.
Acoustic emission monitoring of adhesively bonded wood joints under quasistatic and cyclic fatigue mode II flexure loads using end-notch-flexure specimens. In Conference proceedings Ewgae 2018, presented at the 33rd European conference on acoustic emission testing (EWGAE), Senlis, France, September 12–14, 2018/CETIM: Senlis, 2018/p (10 pp.).

Burda, I./Baechler, C./Gardin, S./Verma, A./Terrasi, G. P./Kovacs, G.
Low-cost scalable printing of carbon nanotube electrodes on elastomeric substrates: towards the industrial production of EAP transducers. *Sens. Actuators A* 2018, 279, 712–724. (joint paper) ▲

Byrne, R. M./Zhou, Y./Zheng, L./Chowdhury, S. K./Aiyangar, A./Zhang, X. S
Segmental variations in facet joint translations during in vivo lumbar extension. *J. Biomech.* 2018, 70, 88–95. ▲

Chakraborty, S./Barbezat, M./Reyes, E. C./Chakraborty, A. K./Terrasi, G. P.
Investigation of the interfacial interactions in epoxy nano-composites filled with functionalized graphene based fillers. *Compos. Interfaces* 2018, 26 (2), 157–182. (joint paper) ▲

Comensoli, L./Maillard, J./Kooli, W. M./Junier, P./Joseph, E.
Soluble and solid iron reduction assays with *Desulfitobacterium hafniense*. *Bio-Protocol* 2018, 8 (17), 1–19. ▲

Dombrowski, M. E./Rynerason, B./LeVasseur, C./Adgate, Z./Donaldson, W. F./Lee, J. Y./Aiyangar, A./Anderst, W. J.
ISSLS Prize in bioengineering science 2018: dynamic imaging of degenerative spondylolisthesis reveals mid-range dynamic lumbar instability not evident on static clinical radiographs. *Eur. Spine J.* 2018, 27 (4), 752–762. ▲

Hosseini, A./Barbezat, M./Michels, J./Ghafoori, E./Motavalli, M./Terrasi, G.
Glass transition evaluation of commercially available epoxy adhesives for strengthening of steel structures with bonded CFRP plates. In Proceedings of the ninth international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018), presented at the 9th international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018), Paris, France, July 17–19, 2018/2018/pp 267–274. (joint paper)

Hosseini, A./Ghafoori, E./Motavalli, M./Nussbaumer, A./Zhao, X. L./Koller, R.
Prestressed unbonded reinforcement system with multiple CFRP plates for fatigue strengthening of steel members. *Polymers* 2018, 10 (3), 264 (13 pp.). (joint paper) ▲

Jones, R./Kinloch, A. J./Michopoulos, J. G./Brunner, A. J./Phan, N.
Delamination growth in polymer-matrix fibre composites and the use of fracture-mechanics data for material characterization and life prediction. In Aircraft sustainment and repair/Jones, R., Baker, A., Matthews, N., Champagne, V., Eds./Elsevier, 2018/pp 763–797.

Kooli, W. M./Comensoli, L./Maillard, J./Albini, M./Gelb, A./Junier, P./Joseph, E.
Bacterial iron reduction and biogenic mineral formation for the stabilisation of corroded iron objects. *Sci. Rep.* 2018, 8 (1), 764 (11 pp.). ▲

Pérez-Galmés, M./Renart, J./Sarrado, C./Brunner, A. J./Rodríguez-Bellido, A.
Towards a consensus on mode II adhesive fracture testing: experimental study. *Theor. Appl. Fract. Mech.* 2018, 98, 210–219. ▲

Ploeg, Heidi-Lynn/Au, Anthony G./Aiyangar, Ameet K./Yamdagni, Nipun/Biegler, Kristopher K./Squire, Matthew W./Illgen II, Richard L.
Preclinical analysis to assess aseptic loosening of orthopaedic implants. In Gefen, Amit/Weihs, Daphne (Eds.), Computer methods in biomechanics and biomedical engineering. Proceedings of the 14th International Symposium CMBBE, Tel Aviv, Israel, 2016, 2018 129–143

Salimian, S./Zadhoush, A./Talebi, Z./Fischer, B./Winiger, P./Winnefeld, F./Zhao, S./Barbezat, M./Koebel, M. M./Malfait, W. J.
Silica aerogel–epoxy nanocomposites: understanding epoxy reinforcement in terms of aerogel surface chemistry and epoxy–silica interface compatibility. *ACS Appl. Nano Mater.* 2018, 1 (8), 4179–4189. (joint paper)

Senteler, M./Aiyangar, A./Weisse, B./Farshad, M./Snedeker, J. G.
Sensitivity of intervertebral joint forces to center of rotation location and trends along its migration path. *J. Biomech.* 2018, 70, 140–148. ▲

Toumpanaki, E./Lees, J. M./Terrasi, G. P.
Bond durability of carbon fiber-reinforced polymer tendons embedded in high-strength concrete. *J. Compos. Constr.* 2018, 22 (5), 04018032 (17 pp.). ▲

Wyrzykowski, M./Terrasi, G./Lura, P.
Expansive high-performance concrete for chemical-prestress applications. *Cem. Concr. Res.* 2018, 107, 275–283. **(joint paper)** ▲

Allegrini, J.
A wind tunnel study on three-dimensional buoyant flows in street canyons with different roof shapes and building lengths. *Build. Environ.* 2018, 143, 71–88. ▲

Allegrini, J./Maesschalck, J./Alessi, G./Glabeke, G./Christophe, J./van Beeck, J.
Porous and geometry-resolved CFD modelling of a lattice transmission tower validated by drag force and flow field measurements. *Eng. Struct.* 2018, 168, 462–472. ▲

Allegrini, Jonas/Carmeliet, Jan.
Simulations of local heat islands in Zürich with coupled CFD and building energy models. *Urban Climate* 2018, 24, 340–359 ▲

Chen, M./Coasne, B./Guyer, R./Derome, D./Carmeliet, J.
Role of hydrogen bonding in hysteresis observed in sorption-induced swelling of soft nanoporous polymers. *Nat. Commun.* 2018, 9 (1), 3507 (7 pp.). ▲

Defraeye, T.
Convective drying of fruit tissue: impact of moisture barrier layer. Presented at the The 20th international drying symposium (IDS 2016), Gifu, Japan, August 7–10, 2016/p (8 pp.).

Defraeye, T./Martylenko, A.
Electro-aerodynamic drying of apple fruit: insights from conjugate airflow-hygrothermal modelling. Presented at the EuroDrying'2017 – 6th European drying conference, Liège, Belgium, June 19–21, 2017/p (8 pp.).

Defraeye, T./Martylenko, A.
Electrohydrodynamic drying of food: new insights from conjugate modeling. *J. Clean. Prod.* 2018, 198, 269–284. **(joint paper)** ▲

Defraeye, T./Martylenko, A.
Future perspectives for electrohydrodynamic drying of biomaterials. *Drying Technol.* 2018, 36 (1), 1–10. ▲

Defraeye, Thijs/Radu, Andrea
Insights in convective drying of fruit by coupled modeling of fruit drying, deformation, quality evolution and convective exchange with the airflow. *Applied Thermal Engineering* 2018, 129, 1026–1038. ▲

Derome, D./Kulasinski, K./Zhang, C./Chen, M./Carmeliet, J.
Using modeling to understand the hygromechanical and hysteretic behavior of the S2 cell wall layer of wood. In *Plant biomechanics. From structure to function at multiple scales*/Geitmann, A., Gril, J., Eds./Springer: Cham, 2018/pp 247–269.

Desarnaud, J./Derluyn, H./Carmeliet, J./Bonn, D./Shahidzadeh, N.
Hopper growth of salt crystals. *J. Phys. Chem. Lett.* 2018, 9 (11), 2961–2966. ▲

Dorostkar, O./Carmeliet, J.
Potential energy as metric for understanding stick-slip dynamics in sheared granular fault gouge: a coupled CFD-DEM study. *Rock Mech. Rock Eng.* 2018, 51 (10), 3281–3294. ▲

Dorostkar, O./Guyer, R. A./Johnson, P. A./Marone, C./Carmeliet, J.
Cohesion-induced stabilization in stick-slip dynamics of weakly wet, sheared granular fault gouge. *J. Geophys. Res.* B 2018, 123 (3), 2115–2126. ▲

Dorostkar, O./Johnson, P./Guyer, R./Marone, C./Carmeliet, J.
Do fluids modify the stick-slip behavior of sheared granular media? In *Poromechanics VI: proceedings of the sixth biot conference on poromechanics*, presented at the Sixth biot conference on poromechanics, Paris, France, July 9–13, 2017/Vandamme, M., Dangla, P., Pereira, J. M., Ghabezloo, S., Eds./American Society of Civil Engineers (ASCE): sine loco, 2017/pp 158–163.

Dorostkar, O./Mirghasemi, A. A.
On the micromechanics of true triaxial test, insights from 3D DEM study. *Iran. J. Sci. Technol.* 2018, 42 (3), 259–273. ▲

Gabrielli, P./Fürer, F./Murray, P./Orehounig, K./Carmeliet, J./Gazzani, M./Mazzotti, M.
A time-series-based approach for robust design of multi-energy systems with energy storage. In *Proceedings of the 28th European symposium on computer aided process engineering*, presented at the 28th European symposium on computer aided process engineering, Graz, June 10–13, 2018/Friedl, A., Klemeš, J. J., Radl, S., Varbanov, P. S., Wallek, T., Eds./Computer aided chemical engineering/Elsevier: Amsterdam, 2018/Vol. 43, pp 525–530. **(joint paper)**

Kubilay, A./Allegrini, J.
Rain sheltering analysis in semi-outdoor environments: case study on passenger comfort in a railway station shelter. *J. Build. Perform. Simul.* 2018, 11 (4), 499–516. ▲

Kubilay, A./Derome, D./Carmeliet, J.
Coupling of physical phenomena in urban microclimate: a model integrating air flow, wind-driven rain, radiation and transport in building materials. *Urban Climate* 2018, 24, 398–418 ▲

Lal, Sreeyuth/Lucci, Francesco/Defraeye, Thijs/Poulikakos, Lily D./Partl, Manfred N./Derome, Dominique/Carmeliet, Jan
CFD modeling of convective scalar transport in a macroporous material for drying applications. *International Journal of Thermal Sciences* 2018, 123, 86–98. **(joint paper)** ▲

- Lemrich, L./Carmeliet, J./Johnson, P. A./Guyer, R./Jia, X.**
Dynamic induced softening in frictional granular materials investigated by discrete-element-method simulation. *Phys. Rev. E* 2017, 96 (6), 062901 (8 pp.). ▲
- Manickathan, L./Defraeye, T./Allegrini, J./Derome, D./Carmeliet, J.**
Comparative study of flow field and drag coefficient of model and small natural trees in a wind tunnel. *Urban For. Urban Green*. 2018, 35, 230–239. (joint paper) ▲
- Manickathan, L./Defraeye, T./Allegrini, J./Derome, D./Carmeliet, J.**
Transpirative cooling potential of vegetation in urban environment using coupled CFD and leaf energy balance model. In *Building simulation 2017. Proceedings of the 15th IBPSA conference*, presented at the 15th IBPSA conference, San Francisco, August 7–9, 2017/Barnaby, C. S., Wetter, M., Eds./Proceedings of the international building performance simulation association/IBPSA, 2017/Vol. 15, pp 2129–2136.
- Manickathan, L./Kubilay, A./Defraeye, T./Allegrini, J./Derome, D./Carmeliet, J.**
Influence of vegetation on pedestrian thermal comfort in a street canyon. In *Proceedings of 1st international conference on new horizons in green civil engineering (NHICE-01)*, presented at the 1st international conference on new horizons in green civil engineering (NHICE-01), Victoria, BC, April 25–27, 2018/Mukhopadhyaya, P., Ed./University of Victoria: Victoria, 2018/p (4 pp.).
- Manickathan, L./Kubilay, A./Defraeye, T./Allegrini, J./Derome, D./Carmeliet, J.**
Integrated vegetation model for studying the cooling potential of trees in urban street canyons. Presented at the 7th international building physics conference, IBPC2018, Syracuse, NY, September 23–26, 2018/p (6 pp.). (joint paper)
- Manickathan, Lento/Defraeye, Thijs/Allegrini, Jonas/Derome, Dominique/Carmeliet, Jan**
Parametric study of the influence of environmental factors and tree properties on the transpirative cooling effect of trees. *Agricultural and Forest Meteorology* 2018, 248, 259–274. ▲
- Marquant, J. F./Bollinger, L. A./Evins, R./Carmeliet, J.**
A new combined clustering method to analyse the potential of district heating networks at large-scale. *Energy* 2018, 156, 73–83. (joint paper) ▲
- Mavromatidis, G./Orehounig, K./Carmeliet, J.**
A review of uncertainty characterisation approaches for the optimal design of distributed energy systems. *Renew. Sustain. Energy Rev.* 2018, 88, 258–277. (joint paper) ▲
- Mavromatidis, G./Orehounig, K./Carmeliet, J.**
Comparison of alternative decision-making criteria in a two-stage stochastic program for the design of distributed energy systems under uncertainty. *Energy* 2018, 156, 709–724. (joint paper) ▲
- Mavromatidis, G./Orehounig, K./Carmeliet, J.**
Design of distributed energy systems under uncertainty: a two-stage stochastic programming approach. *Appl. Energy* 2018, 222, 932–950. (joint paper) ▲
- Mavromatidis, G./Orehounig, K./Carmeliet, J.**
Uncertainty and global sensitivity analysis for the optimal design of distributed energy systems. *Appl. Energy* 2018, 214, 219–238. (joint paper) ▲
- Mazloomi Moqaddam, A./Derome, D./Carmeliet, J.**
Dynamics of contact line pinning and depinning of droplets evaporating on microribs. *Langmuir* 2018, 34 (19), 5635–5645. ▲
- Miglani, S./Orehounig, K./Carmeliet, J.**
A methodology to calculate long-term shallow geothermal energy potential for an urban neighbourhood. *Energy Build.* 2018, 159, 462–473. (joint paper) ▲
- Nault, E./Waibel, C./Carmeliet, J./Andersen, M.**
Development and test application of the UrbanSOLve decision-support prototype for early-stage neighborhood design. *Build. Environ.* 2018, 137, 58–72. (joint paper) ▲
- Patera, A./Carl, S./Stampanoni, M./Derome, D./Carmeliet, J.**
A non-rigid registration method for the analysis of local deformations in the wood cell wall. *Adv. Struct. Chem. Imaging* 2018, 4, 1 (11 pp.).
- Patera, Alessandra/van Den Bulcke, Jan/Boone, Matthieu N./Derome, Dominique/Carmeliet, Jan**
Swelling interactions of earlywood and latewood across a growth ring: global and local deformations. *Wood Science and Technology* 2018, 52 (1), 91–114 ▲
- Prawiranto, K./Defraeye, T./Derome, D./Verboven, P./Nicolai, B./Carmeliet, J.**
New insights into the apple fruit dehydration process at the cellular scale by 3D continuum modeling. *J. Food Eng.* 2018, 239, 52–63. (joint paper) ▲
- Qin, F./Mazloomi Moqaddam, A./Kang, Q./Derome, D./Carmeliet, J.**
Entropic multiple-relaxation-time multirange pseudopotential lattice Boltzmann model for two-phase flow. *Phys. Fluids* 2018, 30 (3), 032104 (11 pp.). ▲
- Sevanto, S./Ryan, M./Dickman, L. T./Derome, D./Patera, A./Defraeye, T./Pangle, R. E./Hudson, P. J./Pockman, W. T.**
Is desiccation tolerance and avoidance reflected in xylem and phloem anatomy of two coexisting arid-zone coniferous trees? *Plant Cell Environ.* 2018, 41 (7), 1551–1564. ▲
- Verboven, P./Defraeye, T./Nicolai, B.**
Measurement and visualization of food microstructure: fundamentals and recent advances. In *Food microstructure and its relationship with quality and stability/Devahastin, S., Ed./Woodhead publishing series in food science, technology and nutrition/Elsevier*, 2018/pp 3–28.

- Wang, D./Landolt, J./Mavromatidis, G./Orehounig, K./Carmeliet, J.**
CESAR: a bottom-up building stock modelling tool for Switzerland to address sustainable energy transformation strategies. *Energy Build.* 2018, 169, 9–26. (joint paper) ▲
- Wöhrwag, M./Semperebon, C./Mazloomi Moqaddam, A./Karlin, I./Kusumaatmaja, H.**
Ternary free-energy entropic lattice boltzmann model with a high density ratio. *Phys. Rev. Lett.* 2018, 120 (23), 234501 (6 pp.). ▲
- Wu, W./Cronjé, P./Nicolai, B./Verboven, P./Opara, U. L./Defraeye, T.**
Virtual cold chain method to model the postharvest temperature history and quality evolution of fresh fruit – A case study for citrus fruit packed in a single carton. *Comput. Electron. Agric.* 2018, 144, 199–208. ▲
- Wu, W./Defraeye, T.**
Identifying heterogeneities in cooling and quality evolution for a pallet of packed fresh fruit by using virtual cold chains. *Appl. Therm. Eng.* 2018, 133, 407–417. ▲
- Wu, W./Häller, P./Cronjé, P./Defraeye, T.**
Full-scale experiments in forced-air precoolers for citrus fruit: impact of packaging design and fruit size on cooling rate and heterogeneity. *Biosyst. Eng.* 2018, 169, 115–125. ▲
- Zhou, X./Carmeliet, J./Derome, D.**
Influence of envelope properties on interior insulation solutions for masonry walls. *Build. Environ.* 2018, 135, 246–256. ▲
- Abouali, S./Shahverdi, M./Ghassemieh, M./Motavalli, M.**
Assessment of flexural strengthening of RC beams with iron based shape memory alloys-submit. Presented at the 11th international congress on civil engineering, Tehran, Iran, May 8–10, 2018/pp 1–7.
- Aljabar, N. J./Zhao, X. L./Al-Mahaidi, R./Ghafoori, E./Motavalli, M./Koay, Y. C.**
Experimental investigation on the CFRP strengthening efficiency of steel plates with inclined cracks under fatigue loading. *Eng. Struct.* 2018, 172, 877–890. ▲
- Aljabar, N. J./Zhao, X. L./Al-Mahaidi, R./Ghafoori, E./Motavalli, M./Koay, Y. C.**
The effect of the CFRP properties on the fatigue strengthening of steel plates in multiaxial loading. In Maintenance, safety, risk, management and life-cycle performance of bridges, presented at the 9th international conference on bridge maintenance, safety and management (IAMBAS 2018), Melbourne, Australia, July 9–13, 2018/Powers, N., Frangopol, D. M., Al-Mahaidi, R., Caprani, C., Eds./Bridge maintenance, safety and management/Taylor & Francis: London, 2018/pp 452–457.
- Breveglieri, M./Camata, G./Spacone, E.**
Strengthened infilled RC frames: continuum and macro modeling in nonlinear finite element analysis. *Composites B* 2018, 151, 78–91. ▲
- Breveglieri, M./Czaderski, C./Michels, J.**
The gradient anchorage method for prestressed CFRP strips: from the development to the strengthening of an 18 M long bridge girder. *SJCE* 2018, 26 (3), 29–40. ▲
- Breveglieri, M./Hosseini, A./Czaderski, C.**
FRP-to-concrete debonding - global and local bond behaviour. In Proceedings of the ninth international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018), presented at the 9th international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018), Paris, France, July 17–19, 2018/2018/pp 353–360.
- Breveglieri, M./Weber, B./Czaderski, C.**
Solar radiation effects on the epoxy adhesive temperature used to bond CFRP to concrete road bridges. Presented at the COMSOL conference 2018, Lausanne, Switzerland, October 22–24, 2018/p (7 pp.).
- Conte, Joel P./Astroza, Rodrigo/Benzoni, Gianmario/Feltrin, Glauco/Loh, Kenneth J./Moaveni, Babak**
Experimental vibration analysis for civil structures. *Testing, sensing, monitoring, and control* 2018, 5, 918
- Czaderski, C./Meier, U.**
EBR strengthening technique for concrete, long-term behaviour and historical survey. *Polymers* 2018, 10 (1), 77 (17 pp.). (joint paper) ▲
- Dauti, D./Dal Pont, S./Weber, B./Briffaut, M./Toropovs, N./Wyrzykowski, M./Sciumé, G.**
Modeling concrete exposed to high temperature: impact of dehydration and retention curves on moisture migration. *Int. J. Numer. Anal. Methods Geomechanics* 2018, 42 (13), 1516–1530. (joint paper) ▲
- Dauti, D./Tengattini, A./Dal Pont, S./Toropovs, N./Briffaut, M./Weber, B.**
Analysis of moisture migration in concrete at high temperature through in-situ neutron tomography. *Cem. Concr. Res.* 2018, 111, 41–55. (joint paper) ▲
- Ehrhart, T./Palma, P./Steiger, R./Frangi, A.**
Numerical and experimental investigations on the mechanical properties of glued laminated timber beams made from European beech wood. Presented at the WCTE 2018 – world conference on timber engineering, Seoul, Republic of Korea, August 20–23, 2018/p (7 pp.).
- Ehrhart, T./Steiger, R./Palma, P./Frangi, A.**
Estimation of tensile strength of European beech timber boards based on density, dynamic modulus of elasticity and local fibre orientation. Presented at the WCTE 2018 – world conference on timber engineering, Seoul, Republic of Korea, August 20–23, 2018/p (6 pp.).
- Ehrhart, T./Steiger, R./Palma, P./Frangi, A.**
Mechanical properties of European beech glued laminated timber. In Proceedings. Meeting 51. International network on timber engineering research, presented at the 5th international network on timber engineering research (INTER) – Meeting 51, Tallin, Estonia, August 13–16, 2018/Görlacher, R., Ed./Timber Scientific Publishing: Karlsruhe, Germany, 2018/p (16 pp.).

Ehrhart, Thomas/Steiger, René/Frangi, Andrea A

non-contact method for the determination of fibre direction of European beech wood (*Fagus sylvatica* L.). *European Journal of Wood and Wood Products* 2018, 76 (3), 925–935 ▲

Gallego, Juan Manuel/Czaderski, Christoph/Breveglieri, Matteo/Michels, Julien

Fatigue behaviour at elevated temperature of RC slabs strengthened with EB CFRP strips. *Composites Part B: Engineering* 2018, 141, 37–49. ▲

Ghafoori, E./Hosseini, A./Al-Mahaidi, R./Zhao, X. L./Motavalli, M.

Prestressed CFRP-strengthening and long-term wireless monitoring of an old roadway metallic bridge. *Eng. Struct.* 2018, 176, 585–605. ▲

Ghafoori, E./Hosseini, A./Al-Mahaidi, R./Zhao, X. L./Motavalli, M./Koay, Y. C.

Prestressed FRP-strengthening and wireless monitoring of a metallic bridge in Australia. In *Maintenance, safety, risk, management and life-cycle performance of bridges*, presented at the 9th international conference on bridge maintenance, safety and management (IAMBAS 2018), Melbourne, Australia, July 9–13, 2018/Powers, N., Frangopol, D. M., Al-Mahaidi, R., Caprani, C., Eds./Bridge maintenance, safety and management/Taylor & Francis: London, 2018/pp 472–480.

Ghafoori, E./Hosseini, A./Pellissier, E./Hueppi, M./Motavalli, M.

Application of pre-stressed un-bonded CFRP for strengthening of metallic structures. In *Proceedings of the ninth international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018)*, presented at the 9th international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018), Paris, France, July 17–19, 2018/2018/pp 375–382.

Harmanci, Y. E./Michels, J./Chatzi, E.

Behaviour of prestressed CFRP anchorages during and after freeze-thaw cycle exposure. *Polymers* 2018, 10 (6), 565 (17 pp.). ▲

Harmanci, Y. E./Zile, E./Michels, J./Chatzi, E.

Cohesive zone modelling of a prestressed non-mechanical CFRP anchorage subjected to freeze-thaw cycles. In *Proceedings of the ninth international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018)*, presented at the 9th international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018), Paris, France, July 17–19, 2018/2018/pp 420–424.

Harmanci, Yunus Emre/Michels, Julien/Czaderski, Christoph/Loser, Roman/Chatzi, Eleni

Long-term residual anchorage resistance of gradient anchorages for prestressed CFRP strips. *Composites Part B: Engineering* 2018, 139, 171–184. (joint paper)ja

Hosseini, A./Barbezat, M./Michels, J./Ghafoori, E./Motavalli, M./Terrasi, G.

Glass transition evaluation of commercially available epoxy adhesives for strengthening of steel structures with bonded CFRP plates. In *Proceedings of the ninth international conference on fib re-reinforced polymer (FRP) composites in civil engineering (CICE 2018)*, presented at the 9th international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018), Paris, France, July 17–19, 2018/2018/pp 267–274. (joint paper)

Hosseini, A./Ghafoori, E./Motavalli, M./Nussbaumer, A./Zhao, X. L./Al-Mahaidi, R.

Flat prestressed unbonded reinforcement (FPUR) system for strengthening of steel I-Beams. In *Maintenance, safety, risk, management and life-cycle performance of bridges*, presented at the 9th international conference on bridge maintenance, safety and management (IAMBAS 2018), Melbourne, Australia, July 9–13, 2018/Powers, N., Frangopol, D. M., Al-Mahaidi, R., Caprani, C., Eds./Bridge maintenance, safety and management/Taylor & Francis: London, 2018/pp 465–471.

Hosseini, A./Ghafoori, E./Motavalli, M./Nussbaumer, A./Zhao, X. L./Al-Mahaidi, R.

Flat prestressed unbonded retrofit system for strengthening of existing metallic I-Girders. *Composites B* 2018, 155, 156–172. ▲

Hosseini, A./Ghafoori, E./Motavalli, M./Nussbaumer, A./Zhao, X. L./Koller, R.

Prestressed unbonded reinforcement system with multiple CFRP plates for fatigue strengthening of steel members. *Polymers* 2018, 10 (3), 264 (13 pp.). (joint paper) ▲

Hosseini, A./Ghafoori, E./Sadeghi Marzaleh, A./Motavalli, M.

Feasibility of accelerated curing for strengthening of steel members by prestressed bonded CFRP plates. In *Proceedings of the ninth international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018)*, presented at the 9th international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018), Paris, France, July 17–19, 2018/2018/pp 259–266.

Hosseini, A./Ghafoori, E./Wellauer, M./Sadeghi Marzaleh, A./Motavalli, M.

Short-term bond behavior and debonding capacity of prestressed CFRP composites to steel substrate. *Eng. Struct.* 2018, 176, 935–947. ▲

Hosseini, E./Ghafoori, E./Leinenbach, C./Motavalli, M./Holdsworth, S. R.

Stress recovery and cyclic behaviour of an Fe–Mn–Si shape memory alloy after multiple thermal activation. *Smart Mater. Struct.* 2018, 27 (2), 025009 (10 pp.). (joint paper) ▲

Izadi, M. R./Ghafoori, E./Motavalli, M./Maalek, S.

Iron-based shape memory alloy for the fatigue strengthening of cracked steel plates: effects of re-activations and loading frequencies. *Eng. Struct.* 2018, 176, 953–967. ▲

Izadi, M. R./Ghafoori, E./Motavalli, M./Maalek, S./Hosseini,

A. Shape memory alloy (SMA) strips for fatigue strengthening of cracked steel plates. In *Proceedings of the ninth international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018)*, presented at the 9th international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018), Paris, France, July 17–19, 2018/2018/pp 367–374.

- Izadi, M. R./Ghafoori, E./Shahverdi, M./Motavalli, M./Maalek, S.**
Development of an iron-based shape memory alloy (Fe-SMA) strengthening system for steel plates. *Eng. Struct.* 2018, 174, 433–446. ▲
- Jockwer, R./Wiehle, P./Palma, P./Klippel, M./Wapp, A./Frangi, A./Hebel, D.**
Structural behaviour and design of timber connections with dowels and slotted-in plates made of bamboo composite. Presented at the WCTE 2018 – world conference on timber engineering, Seoul, Republic of Korea, August 20–23, 2018/National Institute of Forest Science: Seoul/p (10 pp.).
- Kianmofrad, F./Ghafoori, E./Motavalli, M./Rahimian, M.**
Analytical solutions for the flexural behavior of metal beams strengthened with prestressed unbonded CFRP plates. *Civ. Eng. Infrastruct. J.* 2018, 51 (1), 101–118.
- Kotynia, Renata/Staśkiewicz, Michal/Michels, Julien/Czaderski, Christoph/Motavalli, Masoud**
(2018). Shear capacity assessment of posttensioned concrete girders strengthened with CFRP materials. In Hordijk, D.A./Luković, M. (Eds.), *High tech concrete: where technology and engineering meet* (pp. 858–866).
- Li, W./Ghafoori, E./Lu, Y./Li, S./Motavalli, M.**
Analytical solution for stiffness prediction of bonded CFRP-to-steel double strap joints. *Eng. Struct.* 2018, 177, 190–197. ▲
- Michels, J./Shahverdi, M./Czaderski, C.**
Flexural strengthening of structural concrete with iron-based shape memory alloy strips. *Structural Concr.* 2018, 19 (3), 876–891. ▲
- Moshiri, N./Mostofinejad, D./Tajmir-Riahi, A.**
Bond behavior of pre-cured CFRP strips to concrete using externally bonded reinforcement on groove (EBROG) method. In *Proceedings of the ninth international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018)*, presented at the 9th international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018), Paris, France, July 17–19, 2018/2018/pp 361–367.
- Mostofinejad, D./Heydari Mofrad, M./Hosseini, A./Heydari Mofrad, H.**
Investigating the effects of concrete compressive strength, CFRP thickness and groove depth on CFRP-concrete bond strength of EBROG joints. *Constr. Build. Mater.* 2018, 189, 323–337. ▲
- Palma, P./Frangi, A.**
Parametric studies on the fire resistance of steel-to-timber dowelled connections loaded perpendicularly to the grain. Presented at the SiF 2018: the 10th international conference on structures in fire FireSERT, Belfast, UK, June 6–8, 2018/sine nomine: sine loco/pp 183–191.
- Sadeghi Marzaleh, A./Nerbano, S./Sebastiani Croce, A./Steiger, R.**
OSB sheathed light-frame timber shear walls with strong anchorage subjected to vertical load, bending moment, and monotonic lateral load. *Eng. Struct.* 2018, 173, 787–799. ▲
- Sena-Cruz, J./Correia, L./França, P./Michels, J.**
Short and long-term behaviour of RC slabs strengthened with prestressed CFRP laminate strips. In *39th IABSE symposium – engineering the future*, presented at the 39th IABSE symposium, Vancouver, Canada, September 21–23, 2017/IABSE symposium report/International Association for Bridge and Structural Engineering: Zurich, 2017/Vol. 109, pp 2475–2482.
- Shahverdi, M./Michels, J./Czaderski, C./Motavalli, M.**
Iron-based shape memory alloy strips for strengthening RC members: Material behavior and characterization. *Constr. Build. Mater.* 2018, 173, 586–599. ▲
- Shahverdi, M./Vassilopoulos, A. P./Keller, T.**
Mixed-mode quasi-static fracture behavior of GFRP/Balsa sandwiches. In *12th international conference on sandwich structures (ICSS-12): Proceedings*, presented at the 12th international conference on sandwich structures (ICSS-12), Lausanne, Switzerland, August 19–22, 2018/Keller, T., Yanes-Armas, S., Carlsson, L. A., Frostig, Y., Eds./EPFL: Lausanne, 2018/pp 232–234.
- Steiger, R./Fink, G./Nerbano, S./Hack, E./Beyer, K.**
Experimental investigation of friction stresses between adjacent panels made of Oriented Strand Board (OSB) and between OSB panels and glued laminated timber (GLT) frame members. *Mater. Struct.* 2018, 51, 2 (14 pp.). (joint paper) ▲
- Tajmir-Riahi, A./Mostofinejad, D./Moshiri, N.**
Bond resistance of a single groove in EBROG method to attach CFRP sheets on concrete. In *Proceedings of the ninth international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018)*, presented at the 9th international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018), Paris, France, July 17–19, 2018/2018/pp 368–373.
- Weber, B.**
Nonlinear stay cable – bridge deck interaction. In *Experimental vibration analysis for civil structures. Testing, sensing, monitoring, and control*, presented at the EVACES2017: international conference on experimental vibration analysis for civil engineering structures, San Diego, California, United States, July 12–14, 2017/Conte, J. P., Astroza, R., Benzoni, G., Feltrin, G., Loh, K. J., Moaveni, B., Eds./Lecture notes in civil engineering/Springer: Cham, Switzerland, 2018/Vol. 5, pp 902–913.
- Wu, C./He, L./Ghafoori, E./Zhao, X. L.**
Torsional strengthening of steel circular hollow sections (CHS) using CFRP composites. *Eng. Struct.* 2018, 171, 806–816. ▲

Bollinger, L.A./Davis, C.B./Evins, R./Chappin, E.J.L./Nikolic, I.

Multi-model ecologies for shaping future energy systems: design patterns and development paths. *Renewable and Sustainable Energy Reviews* 2018, 82, 3441–3451. ▲

Fricker, R.

Flexible forschung mit flexibler Kommunikation. *Bulletin SEV/VSE, Fachzeitschrift und Verbandsinformationen von Electrosuisse und VSE*, 2018, pp 36–40.

Fumey, B./Buetler, T./Vogt, U. F.

Ultra-low NOx emissions from catalytic hydrogen combustion. *Appl. Energy* 2018, 213, 334–342. (joint paper) ▲

Gabrielli, P./Fürer, F./Murray, P./Orehounig, K./Carmeliet, J./Gazzani, M./Mazzotti, M.

A time-series-based approach for robust design of multi-energy systems with energy storage. In *Proceedings of the 28th European symposium on computer aided process engineering*, presented at the 28th European symposium on computer aided process engineering, Graz, June 10–13, 2018/Friedl, A., Klemenš, J. J., Radl, S., Varbanov, P. S., Wallek, T., Eds./Computer aided chemical engineering/Elsevier: Amsterdam, 2018/Vol. 43, pp 525–530. (joint paper)

Heer, P.

Energiezukunft im Quartier erforschen und demonstrieren. In *Schweizer Energiefachbuch 2017: Nachhaltig Planen, Bauen und Betreiben/Schweizer Energiefachbuch*, Vol. 2017/Kömedia: St. Gallen, 2017/pp 62–65.

Heer, P.

Energiezukunft im Quartier erforschen und demonstrieren. Die Empa sucht mit Grossprojekten nach marktfähigen Lösungen im Gebäude-, Mobilitäts- und Energiebereich. *Bulletin SEV/VSE, Fachzeitschrift und Verbandsinformationen von Electrosuisse und VSE*, 2016, pp 12–15.

Ju, W./Heinz, M. V. F./Pusterla, L./Hofer, M./Fumey, B./Castiglioni, R./Pagani, M./Battaglia, C./Vogt, U. F.

Lab-scale alkaline water electrolyzer for bridging material fundamentals with realistic operation. *ACS Sustain. Chem. Eng.* 2018, 6 (4), 4829–4837. (joint paper) ▲

Knechtle, R.

Ein stabiles Netz dank "smarter" Teilnehmer. *Bulletin SEV/VSE, Fachzeitschrift und Verbandsinformationen von Electrosuisse und VSE*, 2018, pp 57–61.

Mahmoodi, J./Prasanna, A./Hille, S./Patel, M. K./Brosch, T.

Combining "carrot and stick" to incentivize sustainability in households. *Energy Policy* 2018, 123, 31–40. ▲

Marquant, J. F./Bollinger, L. A./Evins, R./Carmeliet, J.

A new combined clustering method to analyse the potential of district heating networks at large-scale. *Energy* 2018, 156, 73–83. (joint paper) ▲

Mavromatidis, G./Orehounig, K./Carmeliet, J.

A review of uncertainty characterisation approaches for the optimal design of distributed energy systems. *Renew. Sustain. Energy Rev.* 2018, 88, 258–277. (joint paper) ▲

Mavromatidis, G./Orehounig, K./Carmeliet, J.

Comparison of alternative decision-making criteria in a two-stage stochastic program for the design of distributed energy systems under uncertainty. *Energy* 2018, 156, 709–724. (joint paper) ▲

Mavromatidis, G./Orehounig, K./Carmeliet, J.

Design of distributed energy systems under uncertainty: a two-stage stochastic programming approach. *Appl. Energy* 2018, 222, 932–950. (joint paper) ▲

Mavromatidis, G./Orehounig, K./Carmeliet, J.

Uncertainty and global sensitivity analysis for the optimal design of distributed energy systems. *Appl. Energy* 2018, 214, 219–238. (joint paper) ▲

Miglani, S./Orehounig, K./Carmeliet, J.

A methodology to calculate long-term shallow geothermal energy potential for an urban neighbourhood. *Energy Build.* 2018, 159, 462–473. (joint paper) ▲

Miglani, S./Orehounig, K./Carmeliet, J.

Integrating a thermal model of ground source heat pumps and solar regeneration within building energy system optimization. *Appl. Energy* 2018, 218, 78–94. ▲

Murray, P./Orehounig, K./Grosspietsch, D./Carmeliet, J.

A comparison of storage systems in neighbourhood decentralized energy system applications from 2015 to 2050. *Appl. Energy* 2018, 231, 1285–1306. ▲

Nault, E./Waibel, C./Carmeliet, J./Andersen, M.

Development and test application of the UrbanSOLve decision-support prototype for early-stage neighborhood design. *Build. Environ.* 2018, 137, 58–72. (joint paper) ▲

Prasanna, A./Patel, M. K./Mahmoodi, J./Brosch, T.

Recent experiences with tariffs for saving electricity in households. *Energy Policy* 2018, 115, 514–522. ▲

Richner, P./Heer, P./Largo, R./Marchesi, E./Zimmermann, M.

NEST – a platform for the acceleration of innovation in buildings. *Inf. Constr.* 2018, 69 (548), e222 (8 pp.). (joint paper) ▲

Wang, D./Landolt, J./Mavromatidis, G./Orehounig, K./Carmeliet, J.

CESAR: a bottom-up building stock modelling tool for Switzerland to address sustainable energy transformation strategies. *Energy Build.* 2018, 169, 9–26. (joint paper) ▲

Wang, D./Orehounig, K./Carmeliet, J.

A study of district heating systems with solar thermal based prosumers. Presented at the 16th international symposium on district heating and cooling, DHC2018, Hamburg, September 9–12, 2018/Energy procedia/Elsevier/Vol. 149, pp 132–140.

Materials Meet Life

Baschnagel, F./Terrasi, G. P./Triantafyllidis, Z./Meier, U.

Fatigue and durability of laminated carbon fibre reinforced polymer straps for bridge suspenders. In Proceedings of the ninth international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018), presented at the 9th international conference on fibre-reinforced polymer (FRP) composites in civil engineering (CICE 2018), Paris, France, July 17–19, 2018/2018/p (8 pp.). [\(joint paper\)](#)

Baschnagel, F./Härdis, R./Triantafyllidis, Z./Meier, U./Terrasi, G. P.

Fatigue and durability of laminated carbon fibre reinforced polymer straps for bridge suspenders. *Polymers* 2018, 10 (2), 169 (14 pp.). [\(joint paper\)](#) ▲

Bouchaala, Adam M.S.

Theoretical study of an electrostatically actuated torsional microsensor for biological applications. *Microsystem Technologies* 2018, 24 (2), 1109–1114 ▲

Brönnimann, R./Anderegg, P./Meier, U.

Referenzmessdaten beim Langzeitmonitoring von Infrastrukturen. *Bautechnik* 2018, 95 (7), 494–498. [\(joint paper\)](#) ▲

Czaderski, C./Meier, U.

EBR strengthening technique for concrete, long-term behaviour and historical survey. *Polymers* 2018, 10 (1), 77 (17 pp.). [\(joint paper\)](#) ▲

Liu, Y.

Improve industrial cone-beam computed tomography by integrating prior information. Doctoral dissertation, ETH Zürich, Zürich, 2017, 155 p. [\(joint paper\)](#)

Meier, U.

An update of past visions of fiber reinforced megastructures. In 40th IABSE symposium – Tomorrow's megastructures, presented at the 40th IABSE symposium, Nantes, France, September 19–21, 2018/IABSE symposium report/International Association for Bridge and Structural Engineering: Zurich, 2018/pp S8–1–S8–8.

Meier, U. O.

Large structures of advanced composites in civil engineering? Presented at the SAMPE Europe Conference 18, Southampton, UK, September 11–13, 2018/pp 1–8.

Sadeghpour, A./Ladd Parada, M./Vieira, J./Povey, M./Rappolt, M.

Global small-angle X-ray scattering data analysis of triacylglycerols in the molten state (part I). *J. Phys. Chem. B* 2018, 122 (45), 10320–10329. ▲

Stritt, C.

Assessment and correction of image degradation in MeV Cone Beam Computed Tomography. Doctoral dissertation, ETH Zürich, Zürich, 2017, 251 p.

Armstrong, J. P. K./Puetzer, J. L./Serio, A./Guex, A. G./Kapnisi, M./Breant, A./Zong, Y./Assal, V./Skaalure, S. C./King, O./et al.

Engineering anisotropic muscle tissue using acoustic cell patterning. *Adv. Mater.* 2018, 30 (43), 1802649 (7 pp.). [\(joint paper\)](#) ▲

Bernard, L./Rupper, P./Faccio, G./Hegemann, D./Scholder, O./Heuberger, M./Maniura-Weber, K./Vandenbossche, M.

Plasma polymer film designs through the eyes of ToF-SIMS. *Biointerph.: J. Biomater. Biolog. Interfac.* 2018, 13 (3), 03B417 (11 pp.). [\(joint paper\)](#) ▲

Buhmann, M. T./Abt, D./Altenried, S./Rupper, P./Betschart, P./Zumstein, V./Maniura-Weber, K./Ren, Q.

Extraction of biofilms from ureteral stents for quantification and cultivation-dependent and -independent analyses. *Front. Microbiol.* 2018, 9, 1470 (9 pp.). [\(joint paper\)](#) ▲

Ghitescu, Roxana-Elena/Popa, Ana-Maria/Schipanski, Angela/Hirsch, Cordula/Yazgan, Gökce/Popa, Valentin I./Rossi, René M./Maniura-Weber, Katharina/Fortunato, Giuseppe

(2018). Catechin loaded PLGA submicron-sized fibers reduce levels of reactive oxygen species induced by MWCNT in vitro. *European Journal of Pharmaceutics and Biopharmaceutics* 2018, 122, 78–86. [\(joint paper\)](#) ▲

Gontsarik, M./Mohammadtaheri, M./Yaghmur, A./Salentinig, S.

pH-triggered nanostructural transformations in antimicrobial peptide/oleic acid self-assemblies. *Biomater. Sci.* 2018, 6 (4), 803–812. ▲

Gutt, B./Ren, Q./Hauser-Gerspach, I./Kardas, P./Stübinger, S./Astasov-Frauenhoffer, M./Waltimo, T.

Beneficial oral biofilms as smart bioactive interfaces. *Front. Microbiol.* 2018, 9, 107 (5 pp.). ▲

Hampel, S./Steitz, J. P./Baierl, A./Lehwald, P./Wiesli, L./Richter, M./Fries, A./Pohl, M./Schneider, G./Dobritzsch, D./et al.

Structural and mutagenesis studies of the thiamine-dependent, ketone-accepting YerE from *Pseudomonas protegens*. *ChemBioChem* 2018, 19 (21), 2283–2292. ▲

Jankowska, D./Heck, T./Schubert, M./Yerlikaya, A./Weymuth, C./Rentsch, D./Schober, I./Richter, M.

Enzymatic synthesis of lignin-based concrete dispersing agents. *ChemBioChem* 2018, 19 (13), 1365–1369. [\(joint paper\)](#) ▲

- Kapnisi, M./Mansfield, C./Marjion, C./Guex, A. G./Perbellini, F./Bardi, I./Humphrey, E. J./Puetzer, J. L./Mawad, D./Koutsogeorgis, D. C./et al.**
Auxetic cardiac patches with tunable mechanical and conductive properties toward treating myocardial infarction. *Adv. Funct. Mater.* 2018, 28 (21), 1800618 (12 pp.). (joint paper) ▲
- Meegan, J. E., Yang, X., Rungsirisakun, R., Cosgrove, S. C., Bushby, R. J., Sadeghpour, A., Ansell, R. J.**
Synthesis and organogelating behaviour of amino acid-functionalised triphenylenes. *Soft Matter* 2018, 13(35), 5922–5932. ▲
- Mertgen, A. S./Yazgan, G./Guex, A. G./Fortunato, G./Müller, E./Huber, L./Schneider, R./Brunelli, M./Rossi, R. M./Maniura-Weber, K./et al.**
Controlling the surface structure of electrospun fibers: effect on endothelial cells and blood coagulation. *Bioin-terph.: J. Biomater. Biolog. Interfac.* 2018, 13 (5), 051001 (10 pp.). (joint paper) ▲
- Mulky, E., Maniura-Weber, K., Frenz, M., Fortunato, G., & Luginbuehl, R.**
Absorbable mineral nanocomposite for biomedical applications: influence of homogenous fiber dispersity on me-
chanical properties. *Journal of Biomedical Materials Research. Part A* 2017, 106(3), 850–857. ▲
- Prajapati, R./Salentinig, S./Yaghmur, A.**
Temperature triggering of kinetically trapped self-assemblies in citrem-phospholipid nanoparticles. *Chem. Phys. Lip.* 2018, 216, 30–38. ▲
- Pupovac, A./Senturk, B./Griffoni, C./Maniura-Weber, K./Rottmar, M./McArthur, S. L.**
Toward immunocompetent 3D skin models. *Adv. Healthc. Mater.* 2018, 7 (12), 1701405 (11 pp.). ▲
- Qin, X. H./Wang, X./Rottmar, M./Nelson, B. J./Maniura-Weber, K.**
Near-infrared light-sensitive polyvinyl alcohol hydrogel photoresist for spatiotemporal control of cell-instructive
3D microenvironments. *Adv. Mater.* 2018, 30 (10), 1705564 (7 pp.). ▲
- Salentinig, S./Zabara, M./Parisse, P./Amenitsch, H.**
Formation of highly ordered liquid crystalline coatings – an in situ GISAXS study. *Phys. Chem. Chem. Phys.* 2018, 20
(34), 21903–21909. ▲
- Schada von Borzyskowski, L./Carrillo, M./Leupold, S./Glatter, T./Kiefer, P./Weishaupt, R./Heinemann,
M./Erb, T. J.**
An engineered Calvin-Benson-Bassham cycle for carbon dioxide fixation in *Methylobacterium extorquens* AM1.
Metabolic Eng. 2018, 47, 423–433. ▲
- Shao, X./Bor, G./Al-Hosayni, S./Salentinig, S./Yaghmur, A.**
Structural characterization of self-assemblies of new omega-3 lipids: docosahexaenoic acid and docosapentaenoic
acid monoglycerides. *Phys. Chem. Chem. Phys.* 2018, 20 (37), 23928–23941. ▲
- Toncelli, C./Innocenti Malini, R./Jankowska, D./Spano, F./Cölfen, H./Maniura-Weber, K./Rossi, R. M./Bo-
esel, L. F.**
Optical glucose sensing using ethanolamine–polyborate complexes. *J. Mater. Chem. B* 2018, 6 (5), 816–823. ▲
- Vandenbossche, M./Gunkel-Grabole, G./Car, A./Bernard, L./Rupper, P./Maniura-Weber, K./Heuberger,
M./Faccio, G./Hegemann, D.**
Near-surface structure of plasma polymer films affects surface behavior in water and its interaction with proteins.
Plasma Chem. Plasma Process. 2018, 38 (4), 851–870. (joint paper) ▲
- Wang, X./Qin, X. H./Hu, C./Terzopoulou, A./Chen, X. Z./Huang, T. Y./Maniura-Weber, K./Pané, S./Nel-
son, B. J.**
3D printed enzymatically biodegradable soft helical microswimmers. *Adv. Funct. Mater.* 2018, 28 (45), 1804107
(8pp.). ▲
- Weishaupt, R./Heuberger, L./Siqueira, G./Gutt, B./Zimmermann, T./Maniura-Weber, K./Salentinig,
S./Faccio, G.**
Enhanced antimicrobial activity and structural transitions of a nanofibrillated cellulose–nisin biocomposite sus-
pension. *ACS Appl. Mater. Interfaces* 2018, 10 (23), 20170–20181. (joint paper) ▲
- Wu, S./Altenried, S./Zogg, A./Zuber, F./Maniura-Weber, K./Ren, Q.**
Role of the Surface Nanoscale Roughness of Stainless Steel on Bacterial Adhesion and Microcolony Formation. *ACS
Omega* 2018, 3 (6), 6456–6464.
- Wu, S./Zuber, F./Maniura-Weber, K./Brugger, J./Ren, Q.**
Nanostructured surface topographies have an effect on bactericidal activity. *J. Nanobiotechnol.* 2018, 16 (1), 20 (9
pp.). ▲
- Yaghmur, A./Al-Hosayni, S./Amenitsch, H./Salentinig, S.**
Structural investigation of bulk and dispersed inverse lyotropic hexagonal liquid crystalline phases of eicosapen-
taenoic acid monoglyceride. *Langmuir* 2017, 33 (49), 14045–14057. ▲
- Abou Jaoude, R./El Khoury, R./Psikuta, A./Nemer, M.**
Individualization of thermophysiological models for thermal sensation assessment in complex environments – A
preliminary study. In *Heat transfer and thermal engineering*, presented at the ASME 2017 international mechanical
engineering congress and exposition, Tampa, Florida, USA, November 3–9, 2017/Proceedings of the ASME 2017
international mechanical engineering congress and exposition (IMECE2017)/ASME: sine loco, 2017/Vol. 8, pp
IMECE2017-71470 (10 pp.).

- Armagan, E./Papkovsky, D. B./Toncelli, C.**
New polymer-based sensor materials and fabrication technologies for large-scale applications. In Quenched-phosphorescence detection of molecular oxygen: applications in life sciences/Papkovsky, D. B., Dmitriev, R. I., Eds./Detection science series, Vol. 11/Royal Society of Chemistry: London, 2018/pp 19–49.
- Armstrong, J. P. K./Puetzer, J. L./Serio, A./Guex, A. G./Kapnisi, M./Breant, A./Zong, Y./Assal, V./Skaalure, S. C./King, O./et al.**
Engineering anisotropic muscle tissue using acoustic cell patterning. *Adv. Mater.* 2018, 30 (43), 1802649 (7 pp.). **(joint paper)**
- Atasağun, H. G./Okur, A./Psikuta, A./Rossi, R. M./Annaheim, S.**
Determination of the effect of fabric properties on the coupled heat and moisture transport of underwear–shirt fabric combinations. *Text. Res. J.* 2018, 88 (11), 1319–1331. ▲
- Baumgartner, W./Schneider, I./Hess, S. C./Stark, W. J./Märsmann, S./Brunelli, M./Calcagni, M./Cinelli, P./Buschmann, J.**
Cyclic uniaxial compression of human stem cells seeded on a bone biomimetic nanocomposite decreases anti-osteogenic commitment evoked by shear stress. *J. Mech. Behav. Biomed. Mater.* 2018, 83, 84–93. ▲
- Boger, C. P./Velt, K. B./Annaheim, S./Bongers, C. C. W. G./Eijsvogels, T. M. H./Daanen, H. A. M.**
Comparison of two telemetric intestinal temperature devices with rectal temperature during exercise. *Physiol. Meas.* 2018, 39 (3), 03NT01 (6pp.). ▲
- Bösiger, P.**
Development of a polypore inspired textile non-woven for wound dressing applications. Doctoral dissertation, Albert-Ludwigs-Universität Freiburg, Freiburg im Breisgau, 2017, 197 p.
- Bösiger, P./Fortunato, G./Schwarze, F. W. M. R.**
Antibacterial activity of aqueous fungal extracts derived from basidiomycetes. *Mod. Appl. Bioequiv. Bioavailab.* 2017, 2 (5), 555598 (3 pp.). **(joint paper)** ▲
- Bösiger, P./Richard, I. M. T./LeGat, L./Michen, B./Schubert, M./Rossi, R. M./Fortunato, G.**
Application of response surface methodology to tailor the surface chemistry of electrospun chitosan-poly(ethylene oxide) fibers. *Carbohydr. Polym.* 2018, 186, 122–131. **(joint paper)** ▲
- Bösiger, Peter/Tegl, Gregor/Richard, Isabelle M.T./Le Gat, Luce/Huber, Lukas/Stagl, Viktoria/Mensah, Anna/Guebitz, Georg M./Rossi, René M./Fortunato, Giuseppino**
Enzyme functionalized electrospun chitosan mats for antimicrobial treatment. *Carbohydrate Polymers* 2018, 181, 551–559. **(joint paper)** ▲
- Daanen, H. A. M./Psikuta, A.**
3D body scanning. In Automation in garment manufacturing/Nayak, R., Padhye, R., Eds./The textile institute book series/Woodhead Publishing: Duxford, 2018/pp 237–252.
- Dąbrowska, A. K./Spano, F./Derler, S./Adlhart, C./Spencer, N. D./Rossi, R. M.**
The relationship between skin function, barrier properties, and body-dependent factors. *Skin Res. Technol.* 2018, 24 (2), 165–174. ▲
- Defraeye, T./Martynenko, A.**
Electrohydrodynamic drying of food: new insights from conjugate modeling. *J. Clean. Prod.* 2018, 198, 269–284. **(joint paper)** ▲
- Dehghani, E. S./Aghion, S./Anwand, W./Consolati, G./Ferragut, R./Panzarasa, G.**
Investigating the structure of crosslinked polymer brushes (brush-gels) by means of Positron Annihilation Spectroscopy. *Eur. Polym. J.* 2018, 99, 415–421. ▲
- Demichelis, R./Garcia, N. A./Raiteri, P./Innocenti Malini, R./Freeman, C. L./Harding, J. H./Gale, J. D.**
Simulation of calcium phosphate species in aqueous solution: force field derivation. *J. Phys. Chem. B* 2018, 122 (4), 1471–1483. ▲
- Eggenberger, P./MacRae, B. A./Kemp, S./Bürgisser, M./Rossi, R. M./Annaheim, S.**
Prediction of core body temperature based on skin temperature, heat flux, and heart rate under different exercise and clothing conditions in the heat in young adult males. *Frontiers Physiol.* 2018, 9, 1780 (11 pp.). ▲
- Fontana, P./Saiani, F./Grütter, M./Croset, J. P./Capt, A./Camenzind, M./Morrissey, M./MacRae, B. A./Rossi, R. M./Annaheim, S.**
Thermo-physiological impact of different firefighting protective clothing ensembles in a hot environment. *Text. Res. J.* 2018, 88 (7), 744–753. ▲
- Ghitescu, Roxana-Elena/Popa, Ana-Maria/Schipanski, Angela/Hirsch, Cordula/Yazgan, Gökçe/Popa, Valentin I./Rossi, René M./Maniura-Weber, Katharina/Fortunato, Giuseppino**
(2018). Catechin loaded PLGA submicron-sized fibers reduce levels of reactive oxygen species induced by MWCNT in vitro. *European Journal of Pharmaceutics and Biopharmaceutics* 2018, 122, 78–86. **(joint paper)** ▲
- Gruyters, W./Verboven, P./Diels, E./Rogge, S./Smeets, B./Ramon, H./Defraeye, T./Nicolai, B. M.**
Modelling cooling of packaged fruit using 3D shape models. *Food Bioprocess Technol.* 2018, 11 (11), 2008–2020. ▲
- Kapnisi, M./Mansfield, C./Marijon, C./Guex, A. G./Perbellini, F./Bardi, I./Humphrey, E. J./Puetzer, J. L./Mawad, D./Koutsogeorgis, D. C./et al.**
Auxetic cardiac patches with tunable mechanical and conductive properties toward treating myocardial infarction. *Adv. Funct. Mater.* 2018, 28 (21), 1800618 (12 pp.). **(joint paper)** ▲
- Keevend, K./Panzarasa, G./Starsich, F. H. L./Zeltner, M./Spyrogianni, A./Tsolaki, E./Fortunato, G./Pratsinis, S. E./Bertazzo, S./Herrmann, I. K.**
Facile meltPEGylation of flame-made luminescent Tb³⁺-doped yttrium oxide particles: hemocompatibility, cellular uptake and comparison to silica. *Chem. Commun.* 2018, 54 (23), 2914–2917. **(joint paper)** ▲

- Kemp, S. E.**
Forensic analysis of sharp weapon damage to textile products. In Forensic textile science/Carr, D., Ed./The textile institute book series/Woodhead Publishing: Duxford, 2017/pp 71–97.
- Koelblen, B./Psikuta, A./Bogdan, A./Annaheim, S./Rossi, R. M.**
Human simulator – a tool for predicting thermal sensation in the built environment. *Build. Environ.* 2018, 143, 632–644. ▲
- Koelblen, B./Psikuta, A./Bogdan, A./Annaheim, S./Rossi, R. M.**
Thermal sensation models: validation and sensitivity towards thermo-physiological parameters. *Build. Environ.* 2018, 130, 200–211. ▲
- MacRae, B. A./Annaheim, S./Spengler, C. M./Rossi, R. M.**
Skin temperature measurement using contact thermometry: a systematic review of setup variables and their effects on measured values. *Frontiers Physiol.* 2018, 9, 29 (24 pp.). ▲
- MacRae, B. A./Annaheim, S./Stämpfli, R./Spengler, C. M./Rossi, R. M.**
Validity of contact skin temperature sensors under different environmental conditions with and without fabric coverage: characterisation and correction. *Int. J. Biometeorol.* 2018, 62 (10), 1861–1872. ▲
- MacRae, B. A./Rossi, R. M./Psikuta, A./Spengler, C. M./Annaheim, S.**
Contact skin temperature measurements and associated effects of obstructing local sweat evaporation during mild exercise-induced heat stress. *Physiol. Meas.* 2018, 39 (7), 075003 (12 pp.). ▲
- Mandal, S./Camenzind, M./Annaheim, S./Rossi, R. M.**
Testing of hot-water and steam protective performance properties of fabrics. In Dolez, Patricia/Vermeersch, Olivier/Izquierdo, Valerio (Eds.), *Advanced characterization and testing of textiles 2018*, (pp. 211–235). ▲
- Mandal, Sumit/Annaheim, Simon/Pitts, Thomas/Camenzind, Martin/Rossi, René M.**
Studies of the thermal protective performance of fabrics under fire exposure: from small-scale to hexagon tests. *Textile Research Journal* 2018, 88 (20), 2339–2352 ▲
- Manickathan, L./Defraeye, T./Allegrini, J./Derome, D./Carmeliet, J.**
Comparative study of flow field and drag coefficient of model and small natural trees in a wind tunnel. *Urban For. Urban Green.* 2018, 35, 230–239. (joint paper) ▲
- Manickathan, L./Kubilay, A./Defraeye, T./Allegrini, J./Derome, D./Carmeliet, J.**
Integrated vegetation model for studying the cooling potential of trees in urban street canyons. Presented at the 7th international building physics conference, IBPC2018, Syracuse, NY, September 23–26, 2018/p (6 pp.). (joint paper)
- Mert, Emel/Psikuta, Agnes/Arévalo, Marlène/Charbonnier, Caecilia/Luible-Bär, Christiane/Bueno, Marie-Ange/Rossi, René M.**
A validation methodology and application of 3D garment simulation software to determine the distribution of air layers in garments during walking. *Measurement* 2018, 117, 153–164. ▲
- Mertgen, A. S./Yazgan, G./Guex, A. G./Fortunato, G./Müller, E./Huber, L./Schneider, R./Brunelli, M./Rossi, R. M./Maniura-Weber, K./et al.**
Controlling the surface structure of electrospun fibers: effect on endothelial cells and blood coagulation. *Biointerph.: J. Biomater. Biolog. Interfac.* 2018, 13 (5), 051001 (10 pp.). (joint paper) ▲
- Morel, A./Domaschke, S./Urundolil Kumaran, V./Alexeev, D./Sadeghpour, A./Ramakrishna, S. N./Ferguson, S. J./Rossi, R. M./Mazza, E./Ehret, A. E./et al.**
Correlating diameter, mechanical and structural properties of poly (L-lactide) fibres from needleless electrospinning. *Acta Biomater.* 2018, 81, 169–183. (joint paper) ▲
- Müller, B. J./Zhdanov, A. V./Borisov, S. M./Foley, T./Okkelman, I. A./Tsytsarev, V./Tang, Q./Erzurumlu, R. S./Chen, Y./Zhang, H./et al.**
Nanoparticle-based fluoroionophore for analysis of potassium Ion dynamics in 3D tissue models and in vivo. *Adv. Funct. Mater.* 2018, 28 (9), 1704598 (12 pp.). ▲
- Oberhofer, K./Wettenschwiler, P. D./Singh, N./Ferguson, S. J./Annaheim, S./Rossi, R. M./Lorenzetti, S.**
The influence of backpack weight and hip belt tension on movement and loading in the pelvis and lower limbs during walking. *Appl. Bionics & Biomech.* 2018, 2018, 4671956 (8 pp.). ▲
- Panzarasa, G./Osypova, A./Sicher, A./Bruinink, A./Dufresne, E. R.**
Controlled formation of chitosan particles by a clock reaction. *Soft Matter* 2018, 14 (31), 6415–6418. (joint paper) ▲
- Panzarasa, G./Pifferi, V.**
On the capacitive behavior of silicon electrodes modified with ultrathin hydrophobic polymer brushes. *J. Solid State Electrochem.* 2018, 22 (4), 1269–1273. ▲
- Prawiranto, K./Defraeye, T./Derome, D./Verboven, P./Nicolai, B./Carmeliet, J.**
New insights into the apple fruit dehydration process at the cellular scale by 3D continuum modeling. *J. Food Eng.* 2018, 239, 52–63. (joint paper) ▲
- Psikuta, A./Koelblen, B./Mert, E./Fontana, P./Annaheim, S.**
An integrated approach to develop, validate and operate thermo-physiological human simulator for the development of protective clothing. *Ind. Health* 2017, 55 (6), 500–512. ▲
- Psikuta, A./Mert, E./Annaheim, S./Rossi, R. M.**
Local air gap thickness and contact area models for realistic simulation of human thermo-physiological response. *Int. J. Biometeorol.* 2018, 62 (7), 1121–1134. ▲

- Qu, Y./Nguyen-Dang, T./Page, A. G./Yan, W./Das Gupta, T./Rotaru, G. M./Rossi, R. M./Favrod, V. D./Bartolomei, N./Sorin, F.**
Superelastic multimaterial electronic and photonic fibers and devices via thermal drawing. *Adv. Mater.* 2018, 30 (27), 1707251 (8 pp.). [\(joint paper\)](#) ▲
- Quandt, B. M./Boesel, L. F./Rossi, R. M.**
Polymer optical fibres in healthcare: solutions, applications and implications. A perspective. *Polym. Int.* 2018, 67 (9), 1150–1154. [\(joint paper\)](#) ▲
- Rifaie-Graham, O./Ulrich, S./Galensowske, N. F. B./Balog, S./Chami, M./Rentsch, D./Hemmer, J. R./Read de Alaniz, J./Boesel, L. F./Bruns, N.**
Wavelength-selective light-responsive DASA-functionalized polymersome nanoreactors. *J. Am. Chem. Soc.* 2018, 140 (25), 8027–8036. [\(joint paper\)](#) ▲
- Rossi, R. M.**
High-performance sportswear. In McLoughlin, John/Sabir, Tasneem (Eds.), *High-performance apparel 2018* (pp. 341–356).
- Rossi, R. M.**
Specific testing for performance sportswear. In Dolez, Patricia/Vermeersch, Olivier/Izquierdo, Valerio (Eds.), *Advanced characterization and testing of textiles 2018* (pp. 433–448).
- Santos, M. S./Oliveira, D./Campos, J. B. L. M./Mayor, T. S.**
Numerical analysis of the flow and heat transfer in cylindrical clothing microclimates – influence of the microclimate thickness ratio. *International Journal of Heat and Mass Transfer* 2018, 117, 71–79. ▲
- Saxena, N./Keilhofer, J./Maurya, A. K./Fortunato, G./Overbeck, J./Müller-Buschbaum, P.**
Facile optimization of thermoelectric properties in PEDOT:PSS thin films through acido-base and redox dedoping using readily available salts. *ACS Appl. Energy Mater.* 2018, 1 (2), 336–342. [\(joint paper\)](#)
- Sokolová, H./Psikuta, A.**
Using a human thermoregulation model as a tool for design and refurbishment of industrial spaces for human occupancy. *Energy Build.* 2018, 168, 76–85. ▲
- Tsiola, A./Toncelli, C./Fodelianakis, S./Michoud, G./Bucheli, T. D./Gavriilidou, A./Kagiorgi, M./Kalantzi, I./Knauer, K./Kotoulas, G./et al.**
Low-dose addition of silver nanoparticles stresses marine plankton communities. *Environ. Sci. Nano* 2018, 5 (8), 1965–1980. ▲
- Ulrich, S./Sadeghpour, A./Rossi, R. M./Bruns, N./Boesel, L. F.**
Wide range of functionalized poly(N-alkyl acrylamide)-based amphiphilic polymer conetworks via active ester precursors. *Macromolecules* 2018, 51 (14), 5267–5277. [\(joint paper\)](#) ▲
- Vandenbossche, M./Petit, L./Mathon-Lagresle, J./Spano, F./Rupper, P./Bernard, L./Hegemann, D.**
Formation of lateral chemical gradients in plasma polymer films shielded by an inclined mask. *Plasma Process. Polym.* 2018, 15 (4), e1700185 (10 pp.). [\(joint paper\)](#) ▲
- Veselá, S./Psikuta, A./Frijns, A. J. H.**
Local clothing thermal properties of typical office ensembles under realistic static and dynamic conditions. *Int. J. Biometeorol.* 2018, 62 (12), 2215–2229. ▲
- Zhai, L./Adlhart, C./Spano, F./Innocenti Malini, R./Piątek, A. K./Li, J./Rossi, R. M.**
Prediction of steam burns severity using raman spectroscopy on ex vivo porcine skin. *Sci. Rep.* 2018, 8 (1), 6946 (11 pp.). ▲
- Zucchetto, Nicola/Reber, Michael J./Pestalozzi, Lias/Schmid, Ramon/Neels, Antonia/Brühwiler, Dominik**
The structure of mesoporous silica obtained by pseudomorphic transformation of SBA-15 and SBA-16. *Microporous and Mesoporous Materials* 2018, 257, 232–240. [\(joint paper\)](#) ▲
- Aengenheister, L./Dietrich, D./Sadeghpour, A./Manser, P./Diener, L./Wichser, A./Karst, U./Wick, P./Buerki-Thurnherr, T.**
Gold nanoparticle distribution in advanced in vitro and ex vivo human placental barrier models. *J. Nanobiotechnol.* 2018, 16 (1), 79 (16 pp.). [\(joint paper\)](#) ▲
- Balogh-Michels, Z./Faeht, A./Kleiner, S./Margarf, P./Dommann, A./Neels, A.**
In situ XRD experiments on the growth of expanded austenite using different process gases. *Defect Diffus. Forum* 2018, 383, 142–146. [\(joint paper\)](#) ▲
- Beltran, M. A./Paganin, D. M./Pelliccia, D.**
Phase-and-amplitude recovery from a single phase-contrast image using partially spatially coherent x-ray radiation. *J. Opt.* 2018, 20 (5), 055605 (5 pp.). ▲
- Carrel, M./Morales, V. L./Beltran, M. A./Derlon, N./Kaufmann, R./Morgenroth, E./Holzner, M.**
Biofilms in 3D porous media: delineating the influence of the pore network geometry, flow and mass transfer on biofilm development. *Water Res.* 2018, 134, 280–291. ▲
- Gesevičius, Donatas/Neels, Antonia/Jenatsch, Sandra/Hack, Erwin/Viani, Lucas/Athanasopoulos, Stavros/Nüesch, Frank/Heier, Jakob**
Increasing photovoltaic performance of an organic cationic chromophore by anion exchange. *Advanced Science* 2018, 1700496 (9 pp.). [\(joint paper\)](#) ▲
- Ghaemi, B./Shaabani, E./Najafi-Taher, R./Jafari Nodoshan, S./Sadeghpour, A./Kharrazi, S./Amani, A.**
Intracellular ROS induction by Ag@ZnO core-shell nanoparticles: frontiers of permanent optically active holes in breast cancer theranostic. *ACS Appl. Mater. Interfaces* 2018, 10 (29), 24370–24381. ▲

- Kaufmann, R./Plamondon, M./Hofmann, J./Neels, A.**
Comparison of different phase retrieval algorithms. In Developments in X-ray tomography XI, presented at the SPIE optical engineering + applications, San Diego, CA, USA, August 6–10, 2017/Müller, B., Wang, G., Eds./Proceedings of SPIE/SPIE: Bellingham, WA, USA, 2017/Vol. 10391, p 1039115 (7 pp.).
- Kolokytha, Selina/Flisch, Alexander/Lüthi, Thomas/Plamondon, Mathieu/Visser, Wicher/Schwanger, Adrian/Hardmeier, Diana/Costin, Marius/Vienne, Caroline/Sukowski, Frank/Hasler, Ulf/Dorion, Irène/Gadi, Najib/Maitrejean, Serge/Marciano, Abraham/Canonica, Andrea/Rochat, Eric/Koomen, Ger/Slegt, Micha**
Creating a reference database of cargo inspection X-ray images using high energy radiographs of cargo mock-ups. Multimedia Tools and Applications 2018 ▲
- Ladd Parada, M./Sadeghpour, A./Vieira, J./Povey, M./Rappolt, M.**
Global small-angle X-ray scattering data analysis of triacylglycerols in the α -phase (part II). J. Phys. Chem. B 2018, 122 (45), 10330–10336. ▲
- Leclaire, N. A./Li, M./Véron, A. C./Neels, A./Heier, J./Reimers, J. R./Nüesch, F. A.**
Cyanine platelet single crystals: growth, crystal structure and optical spectra. Phys. Chem. Chem. Phys. 2018, 20 (46), 29166–29173. (joint paper) ▲
- Liu, Y.**
Improve industrial cone-beam computed tomography by integrating prior information. Doctoral dissertation, ETH Zürich, Zürich, 2017, 155 p. (joint paper)
- Meduňa, M./Isa, F./Jung, A./Marzegalli, A./Albani, M./Isella, G./Zweiacker, K./Miglio, L./von Känel, H.**
Lattice tilt and strain mapped by X-ray scanning nanodiffraction in compositionally graded SiGe/Si microcrystals. J. Appl. Crystallogr. 2018, 51 (2), 368–385. (joint paper) ▲
- Merriam, T./Kaufmann, R./Ebert, L./Figli, R./Erni, R./Pauer, R./Sieberth, T.**
Differentiation of dental restorative materials combining energy-dispersive X-ray fluorescence spectroscopy and post-mortem CT. Forensic Sci. Med. Pathol. 2018, 14 (2), 163–173. (joint paper) ▲
- Morel, A./Domaschke, S./Urundolil Kumaran, V./Alexeev, D./Sadeghpour, A./Ramakrishna, S. N./Ferguson, S. J./Rossi, R. M./Mazza, E./Ehret, A. E./et al.**
Correlating diameter, mechanical and structural properties of poly (L-lactide) fibres from needleless electrospinning. Acta Biomater. 2018, 81, 169–183. (joint paper) ▲
- Paganin, D. M./Beltran, M. A./Petersen, T. C.**
Nodal-line dynamics via exact polynomial solutions for coherent waves traversing aberrated imaging systems. Opt. Lett. 2018, 43 (5), 975–978. ▲
- Paganin, D. M./Petersen, T. C./Beltran, M. A.**
Propagation of fully coherent and partially coherent complex scalar fields in aberration space. Phys. Rev. A 2018, 97 (2), 023835 (14 pp.). ▲
- Parditka, B./Zaka, H./Erdélyi, G./Langer, G. A./Ibrahim, M./Schmitz, G./Balogh-Michels, Z./Erdélyi, Z.**
The transition from linear to-parabolic growth of Cu₃Si phase in Cu/a-Si system. Scr. Mater. 2018, 149, 36–39. ▲
- Qu, Y./Nguyen-Dang, T./Page, A. G./Yan, W./Das Gupta, T./Rotaru, G. M./Rossi, R. M./Favrod, V. D./Bartolomei, N./Sorin, F.**
Superelastic multimaterial electronic and photonic fibers and devices via thermal drawing. Adv. Mater. 2018, 30 (27), 1707251 (8 pp.). (joint paper) ▲
- Ravikumar, M./Kathiravan, A./Neels, A./Mothi, E. M.**
Tin(IV) porphyrins containing β -substituted bromines: synthesis, conformations, electrochemistry and photophysical evaluation: Tin(IV) Porphyrins Containing β -Substituted Bromines: Synthesis, Conformations, Electrochemistry and Photophysical Evaluation. Eur. J. Inorg. Chem. 2018, 2018 (34), 3868–3877. ▲
- Sadeghpour, A./Rappolt, M./Misra, S./Kulkarni, C. V.**
Bile salts caught in the act: from emulsification to nanostructural reorganization of lipid self-assemblies. Langmuir 2018, 34 (45), 13626–13637. ▲
- Saxena, N./Keilhofer, J./Maurya, A. K./Fortunato, G./Overbeck, J./Müller-Buschbaum, P.**
Facile optimization of thermoelectric properties in PEDOT:PSS thin films through acido-base and redox dedoping using readily available salts. ACS Appl. Energy Mater. 2018, 1 (2), 336–342. (joint paper)
- Stritt, C./Plamondon, M./Hofmann, J./Flisch, A.**
Influence of scatter in X-ray imaging and scatter correction methods for industrial applications. In Handbook of x-ray imaging: physics and technology/Russo, P., Ed./Series in medical physics and biomedical engineering/Taylor & Francis: Boca Raton, 2018/pp 959–968.
- Thamsen, B./Plamondon, M./Granegger, M./Schmid Daners, M./Kaufmann, R./Neels, A./Meboldt, M.**
Investigation of the axial gap clearance in a hydrodynamic-passive magnetically levitated rotary blood pump using X-ray radiography: AXIAL GAP CLEARANCE IN THE HVAD. Artif. Organs 2018, 42 (5), 510–515. ▲
- Ulrich, S./Sadeghpour, A./Rossi, R. M./Bruns, N./Boesel, L. F.**
Wide range of functionalized poly(N-alkyl acrylamide)-based amphiphilic polymer conetworks via active ester precursors. Macromolecules 2018, 51 (14), 5267–5277. (joint paper) ▲
- Vasilca, V./Sadeghpour, A./Rawson, S./Hawke, L. E./Baldwin, S. A./Wilkinson, T./Bannister, D./Postis, V. L. G./Rappolt, M./Muench, S. P./et al.**
Spherical-supported membranes as platforms for screening against membrane protein targets. Anal. Biochem. 2018, 549, 58–65. ▲
- Yan, Y./Gooneie, A./Ye, H./Deng, L./Qiu, Z./Reifler, F. A./Hufenus, R.**
Morphology and crystallization of biobased polyamide 56 blended with polyethylene terephthalate. Macromol. Mater. Eng. 2018, 303 (9), 1800214 (10 pp.). (joint paper) ▲

- Yang, F./Prade, F./Griffa, M./Kaufmann, R./Herzen, J./Pfeiffer, F./Lura, P.**
X-ray dark-field contrast imaging of water transport during hydration and drying of early-age cement-based materials. *Mater. Charact.* 2018, 142, 560–576. (joint paper) ▲
- Zhou, T./Yang, F./Kaufmann, R./Wang, H.**
Applications of laboratory-based phase-contrast imaging using speckle tracking technique towards high energy X-rays. *J. Imaging* 2018, 4 (5), 69 (7 pp.). (joint paper)
- Zucchetto, Nicola/Reber, Michael J./Pestalozzi, Lias/Schmid, Ramon/Neels, Antonia/Brühwiler, Dominik**
The structure of mesoporous silica obtained by pseudomorphic transformation of SBA-15 and SBA-16. *Microporous and Mesoporous Materials* 2018, 257, 232–240. (joint paper) ▲
- Zweiacker, K. W./Liu, C./Gordillo, M. A./McKeown, J. T./Campbell, G. H./Wiezorek, J. M. K.**
Composition and automated crystal orientation mapping of rapid solidification products in hypoeutectic Al-4 at.%Cu alloys. *Acta Mater.* 2018, 145, 71–83. ▲
- Baltic, R./Donati, F./Singha, A./Wäckerlin, C./Dreiser, J./Delley, B./Pivetta, M./Rusponi, S./Brune, H.**
Magnetic properties of single rare-earth atoms on graphene/Ir(111). *Phys. Rev. B* 2018, 98 (2), 024412 (12 pp.). ▲
- Bernard, L./Rupper, P./Faccio, G./Hegemann, D./Scholder, O./Heuberger, M./Maniura-Weber, K./Vandenbossche, M.**
Plasma polymer film designs through the eyes of ToF-SIMS. *Biointerph.: J. Biomater. Biolog. Interfac.* 2018, 13 (3), 03B417 (11 pp.). (joint paper) ▲
- Bernard, L./Khikhlovskiy, V./van Breemen, A./Michels, J. J./Janssen, R./Kemerink, M./Gelinck, G./Pilet, N.**
Study of the morphology of organic ferroelectric diodes with combined scanning force and scanning transmission X-ray microscopy. *Organic Electronics* 2018, 53, 242–248. ▲
- Cansever, H./Narkowicz, R./Lenz, K./Fowley, C./Ramasubramanian, L./Yildirim, O./Niesen, A./Huebner, T./Reiss, G./Lindner, J./et al.**
Investigating spin-transfer torques induced by thermal gradients in magnetic tunnel junctions by using micro-cavity ferromagnetic resonance. *J. Phys. D* 2018, 51 (22), 224009 (10 pp.). ▲
- Ernst, K. H.**
On the density of racemic and homochiral crystals: Wallach, Liebisch and Sommerfeld in Göttingen. *Chimia* 2018, 72 (6), 399–403. ▲
- Ganesan, R./Akhavan, B./Dong, X./McKenzie, D. R./Bilek, M. M. M.**
External magnetic field increases both plasma generation and deposition rate in HiPIMS. *Surf. Coat. Technol.* 2018, 352, 671–679. ▲
- Ganesan, R./Akhavan, B./Hiob, M. A./McKenzie, D. R./Weiss, A. S./Bilek, M. M. M.**
HiPIMS carbon coatings show covalent protein binding that imparts enhanced hemocompatibility. *Carbon* 2018, 139, 118–128. ▲
- Gellman, A. J./Ernst, K. H.**
Chiral autocatalysis and mirror symmetry breaking. *Catal. Lett.* 2018, 148 (6), 1610–1621. ▲
- Hosseini, D./Donat, F./Kim, S. M./Bernard, L./Kierzkowska, A. M./Müller, C. R.**
Redox-driven restructuring of FeMnZr-oxygen carriers enhances the purity and yield of H₂ in a chemical looping process. *ACS Appl. Energy Mater.* 2018, 1 (3), 1294–1303. ▲
- Kahr, B./Martin, A. T./Ernst, K. H.**
On the chiroptical properties of racemic crystals. *Chirality* 2018, 30 (4), 378–382. ▲
- Kawecki, M./Bernard, L.**
Database of proteinogenic amino acid reference spectra for Bismuth-cluster ToF-SIMS. I. Negative polarity. *Surf. Sci. Spectra* 2018, 25, 015001 (28 pp.).
- Kawecki, M./Bernard, L.**
Database of proteinogenic amino acid reference spectra for Bismuth-cluster ToF-SIMS. II. Positive polarity. *Surf. Sci. Spectra* 2018, 25, 015002 (29 pp.).
- Kawecki, M./Hany, R./Diethelm, M./Jenatsch, S./Grossmann, Q./Bernard, L./Hug, H. J.**
Direct measurement of ion redistribution and resulting modification of chemical equilibria in polymer thin film light-emitting electrochemical cells. *ACS Appl. Mater. Interfaces* 2018, 10 (45), 39100–39106. (joint paper) ▲
- Kettner, M./Maslyuk, V. V./Nürenberg, D./Seibel, J./Gutierrez, R./Cuniberti, G./Ernst, K. H./Zacharias, H.**
Chirality-dependent electron spin filtering by molecular monolayers of helicenes. *J. Phys. Chem. Lett.* 2018, 9 (8), 2025–2030. ▲
- Lewin, E./Counsell, J./Patscheider, J.**
Spectral artefacts post sputter-etching and how to cope with them – a case study of XPS on nitride-based coatings using monoatomic and cluster ion beams. *Appl. Surf. Sci.* 2018, 442, 487–500. ▲
- Li, J./Martin, K./Avarvari, N./Wäckerlin, C./Ernst, K. H.**
Spontaneous separation of on-surface synthesized tris-helicenes into two-dimensional homochiral domains. *Chem. Commun.* 2018, 54 (57), 7948–7951. ▲
- Lu, H. L./Cao, Y./Qi, J./Bakker, A./Strassert, C. A./Lin, X./Ernst, K. H./Du, S./Fuchs, H./Gao, H. J.**
Modification of the potential landscape of molecular rotors on Au(111) by the presence of an STM tip. *Nano Lett.* 2018, 18 (8), 4704–4709. ▲
- Mairena, A./Parschau, M./Seibel, J./Wienke, M./Rentsch, D./Terfort, A./Ernst, K. H.**
Diastereoselective self-assembly of bisheptahelicene on Cu(111). *Chem. Commun.* 2018, 54 (63), 8757–8760. (joint paper) ▲

- Mairena, A./Wäckerlin, C./Wienke, M./Grenader, K./Terfort, A./Ernst, K. H.**
Diastereoselective Ullmann coupling to bishelicenes by surface topochemistry. *J. Am. Chem. Soc.* 2018, 140 (45), 15186–15189. ▲
- Mairena, A./Wienke, M./Martin, K./Avarvari, N./Terfort, A./Ernst, K. H./Wäckerlin, C.**
Stereospecific autocatalytic surface explosion chemistry of polycyclic aromatic hydrocarbons. *J. Am. Chem. Soc.* 2018, 140 (24), 7705–7709. ▲
- Mitchell, Sharon/Martín, Antonio J./Scholder, Olivier/Verel, René/Hauert, Roland/Bernard, Laetitia/Jensen, Christopher/Schwefer, Meinhard/Pérez-Ramírez, Javier**
Elucidating the distribution and speciation of boron and cesium in BCsX zeolite catalysts for styrene production. *ChemPhysChem.* 2018, 19 (4) 437–445 (joint paper) ▲
- Nowakowska, S./Mazzola, F./Alberti, M. N./Song, F./Voigt, T./Nowakowski, J./Wäckerlin, A./Wäckerlin, C./Wiss, J./Schweizer, W. B./et al.**
Adsorbate-induced modification of the confining barriers in a quantum box array. *ACS Nano* 2018, 12 (1), 768–778. ▲
- Penedo, M./Hug, H. J.**
Off-resonance intermittent contact mode multi-harmonic scanning force microscopy. *Appl. Phys. Lett.* 2018, 113 (2), 023103 (5 pp.). ▲
- Penedo, M./Marioni, M. A./Baćani, M./Schwenk, J./Hug, H. J.**
Halbach effect at the nanoscale from chiral spin textures. *Nano Lett.* 2018, 18 (4), 2263–2267. ▲
- Razafiarison, T./Holenstein, C. N./Stauber, T./Jović, M./Vertudes, E./Loparic, M./Kawecki, M./Bernard, L./Silvan, U./Snedeker, J. G.**
Biomaterial surface energy-driven ligand assembly strongly regulates stem cell mechanosensitivity and fate on very soft substrates. *Proc. Natl. Acad. Sci. U. S. A.* 2018, 115 (18), 4631–4636. ▲
- Rieger, A./Sax, C./Bauert, T./Wäckerlin, C./Ernst, K. -H.**
Chiral molecules adsorbed on a solid surface: tartaric acid diastereomers and their surface explosion on Cu(111). *Chirality* 2018, 30 (4), 369–377. ▲
- Sambalova, O./Thorwarth, K./Heeb, N. V./Bleiner, D./Zhang, Y./Borgschulte, A./Kroll, A.**
Carboxylate functional groups mediate interaction with silver nanoparticles in biofilm matrix. *ACS Omega* 2018, 3 (1), 724–733. (joint paper)
- Tran, C. T./Ganesan, R./McKenzie, D. R.**
Quantifying plasma immersion ion implantation of insulating surfaces in a dielectric barrier discharge: how to control the dose. *Proc. R. Soc. A* 2018, 474 (2215), 20180263 (16 pp.). ▲
- Trant, M./Fischer, M./Thorwarth, K./Gauter, S./Patscheider, J./Hug, H. J.**
Tunable ion flux density and its impact on ALN thin films deposited in a confocal DC magnetron sputtering system. *Surf. Coat. Technol.* 2018, 348, 159–167. ▲
- Tucker, M. D./Putman, K. J./Ganesan, R./Lattemann, M./Stueber, M./Ulrich, S./Bilek, M. M. M./McKenzie, D. R./Marks, N. A.**
The behaviour of arcs in carbon mixed-mode high-power impulse magnetron sputtering. *J. Phys. D* 2017, 50 (14), 145205 (9 pp.). ▲
- Ueba, H./Passerone, D./Parschau, M./Ernst, K. H.**
Action spectra associated with inelastic two-electron tunneling through a single molecule: propene on Cu(211). *Surf. Sci.* 2018, 678, 206–214. (joint paper) ▲
- Vandenbossche, M./Gunkel-Grabole, G./Car, A./Bernard, L./Rupper, P./Maniura-Weber, K./Heuberger, M./Faccio, G./Hegemann, D.**
Near-surface structure of plasma polymer films affects surface behavior in water and its interaction with proteins. *Plasma Chem. Plasma Process.* 2018, 38 (4), 851–870. (joint paper) ▲
- Vandenbossche, M./Petit, L./Mathon-Lagresle, J./Spano, F./Rupper, P./Bernard, L./Hegemann, D.**
Formation of lateral chemical gradients in plasma polymer films shielded by an inclined mask. *Plasma Process. Polym.* 2018, 15 (4), e1700185 (10 pp.). (joint paper) ▲
- Wäckerlin, C./Donati, F./Singha, A./Baltic, R./Decurtins, S./Liu, S. X./Rusponi, S./Dreiser, J.**
Excited spin-state trapping in spin crossover complexes on ferroelectric substrates. *J. Phys. Chem. C* 2018, 122 (15), 8202–8208. ▲
- Wang, S./Kravchyk, K. V./Filippin, A. N./Müller, U./Tiwari, A. N./Buecheler, S./Bodnarchuk, M. I./Kovalenko, M. V.**
Aluminum chloride-graphite batteries with flexible current collectors prepared from earth-abundant elements. *Adv. Sci.* 2018, 5 (4), 1700712 (6 pp.). (joint paper) ▲
- Wu, Q./Soppa, K./Scherrer, N./Watts, B./Yokosawa, T./Bernard, L./Araki, T./Döbeli, M./Meyer, M./Spiecker, E./et al.**
Investigation of the foil structure and corrosion mechanisms of modern Zwischgold using advanced analysis techniques. *J. Cult. Herit.* 2018, 31, 122–132. ▲
- Zhao, X./Schwenk, J./Mandru, A. O./Penedo, M./Baćani, M./Marioni, M. A./Hug, H. J.**
Magnetic force microscopy with frequency-modulated capacitive tip-sample distance control. *New J. Phys.* 2018, 20, 013018 (11 pp.). ▲
- Zoppi, Laura/Stöckl, Quirin/Mairena, Anais/Allemann, Oliver/Siegel, Jay S./Baldrige, Kim K./Ernst, Karl-Heinz**
Pauli repulsion versus van der Waals: interaction of indenocorannulene with a Cu(111) surface. *Journal of Physical Chemistry B* 2018, 122 (2), 871–877 ▲

Aengenheister, L.
Risks and opportunities of nanomaterial exposure during pregnancy: from placental uptake and translocation to fetal consequences. Doctoral dissertation, ETH Zurich, Zürich, 2018, 227 p.

Aengenheister, L./Dietrich, D./Sadeghpour, A./Manser, P./Diener, L./Wichser, A./Karst, U./Wick, P./Buerki-Thurnherr, T.
Gold nanoparticle distribution in advanced in vitro and ex vivo human placental barrier models. *J. Nanobiotechnol.* 2018, 16 (1), 79 (16 pp.). (joint paper) ▲

Aengenheister, L./Keevend, K./Muoth, C./Schönenberger, R./Diener, L./Wick, P./Buerki-Thurnherr, T.
An advanced human in vitro co-culture model for translocation studies across the placental barrier. *Sci. Rep.* 2018, 8 (1), 5388 (12 pp.). ▲

Barosova, H./Chortarea, S./Peikertova, P./Clift, M. J. D./Petri-Fink, A./Kukutschova, J./Rothen-Rutishauser, B.
Biological response of an in vitro human 3D lung cell model exposed to brake wear debris varies based on brake pad formulation. *Arch. Toxicol.* 2018, 92 (7), 2339–2351. ▲

Bertero, E./Hasegawa, M./Staubli, S./Pellicer, E./Herrmann, I. K./Sort, J./Michler, J./Philippe, L.
Electrodeposition of amorphous Fe-Cr-Ni stainless steel alloy with high corrosion resistance, low cytotoxicity and soft magnetic properties. *Surf. Coat. Technol.* 2018, 349, 745–751. (joint paper) ▲

Beyeler, S./Chortarea, S./Rothen-Rutishauser, B./Petri-Fink, A./Wick, P./Tschanz, S. A./von Garnier, C./Blank, F.
Acute effects of multi-walled carbon nanotubes on primary bronchial epithelial cells from COPD patients. *Nanotoxicology* 2018, 12 (7), 699–711. ▲

Bohmer, N./Rippl, A./May, S./Walter, A./Heo, M. B./Kwak, M./Roesslein, M./Song, N. W./Wick, P./Hirsch, C.
Interference of engineered nanomaterials in flow cytometry: a case study. *Colloids Surf. B* 2018, 172, 635–645. ▲

Buerki-Thurnherr, T./Schaepper, K./Aengenheister, L./Wick, P.
Developmental toxicity of nanomaterials. Need for a better understanding of indirect effects. *Chem. Res. Toxicol.* 2018, 31 (8), 641–642. ▲

Chortarea, S./Fytianos, K./Rodriguez-Lorenzo, L./Petri-Fink, A./Rothen-Rutishauser, B.
Distribution of polymer-coated gold nanoparticles in a 3D lung model and indication of apoptosis after repeated exposure. *Nanomedicine* 2018, 13 (10), 1169–1185. ▲

Drasler, B./Kucki, M./Delhaes, F./Buerki-Thurnherr, T./Vanhecke, D./Korejwo, D./Chortarea, S./Barosova, H./Hirsch, C./Petri-Fink, A./et al.
Single exposure to aerosolized graphene oxide and graphene nanoplatelets did not initiate an acute biological response in a 3D human lung model. *Carbon* 2018, 137, 125–135. ▲

Fadeel, B./Bussy, C./Merino, S./Vázquez, E./Flahaut, E./Mouchet, F./Evariste, L./Gauthier, L./Koivisto, A. J./Vogel, U./et al.
Safety assessment of graphene-based materials: focus on human health and the environment. *ACS Nano* 2018, 12 (11), 10582–10620. (joint paper) ▲

Ghitescu, Roxana-Elena/Popa, Ana-Maria/Schipanski, Angela/Hirsch, Cordula/Yazgan, Gökçe/Popa, Valentin I./Rossi, René M./Maniura-Weber, Katharina/Fortunato, Giuseppino
(2018). Catechin loaded PLGA submicron-sized fibers reduce levels of reactive oxygen species induced by MWCNT in vitro. *European Journal of Pharmaceutics and Biopharmaceutics* 2018, 122, 78–86. (joint paper) ▲

Gubala, V./Johnston, L. J./Krug, H./Moore, C. J./Ober, C. K./Schwenk, M./Vert, M.
Engineered nanomaterials and human health: Part 2. Applications and nanotoxicology (IUPAC Technical Report). *Pure Appl. Chem.* 2018, 90 (8), 1325–1356. ▲

Gubala, V./Johnston, L. J./Liu, Z./Krug, H./Moore, C. J./Ober, C. K./Schwenk, M./Vert, M.
Engineered nanomaterials and human health: Part 1. Preparation, functionalization and characterization (IUPAC Technical Report). *Pure Appl. Chem.* 2018, 90 (8), 1283–1324. ▲

Keevend, K./Panzarasa, G./Starsich, F. H. L./Zeltner, M./Spyrogianni, A./Tsolaki, E./Fortunato, G./Pratsinis, S. E./Bertazzo, S./Herrmann, I. K.
Facile meltPEGylation of flame-made luminescent Tb³⁺-doped yttrium oxide particles: hemocompatibility, cellular uptake and comparison to silica. *Chem. Commun.* 2018, 54 (23), 2914–2917. (joint paper) ▲

Kucki, M./Aengenheister, L./Diener, L./Rippl, A. V./Vranic, S./Newman, L./Vazquez, E./Kostarelos, K./Wick, P./Buerki-Thurnherr, T.
Impact of graphene oxide on human placental trophoblast viability, functionality and barrier integrity. *2D mater.* 2018, 5 (3), 035014 (15 pp.). ▲

Lacroix, G./Koch, W./Ritter, D./Gutleb, A. C./Larsen, S. T./Loret, T./Zanetti, F./Constant, S./Chortarea, S./Rothen-Rutishauser, B./et al.
Air-liquid interface in vitro models for respiratory toxicology research: consensus workshop and recommendations. *Appl. In Vitro Toxicol.* 2018, 4 (2), 91–106.

Maguire, C. M./Rösslein, M./Wick, P.
Characterisation of particles in solution – a perspective on light scattering and comparative technologies. *Sci. Technol. Adv. Mater.* 2018, 19 (1), 732–745. ▲

May, S.
The effect of different engineered nanomaterials (ENMs) on DNA damage and repair pathways. Doctoral dissertation, Universität Konstanz, Konstanz, 2018, 248 p.

- May, S./Hirsch, C./Rippl, A./Bohmer, N./Kaiser, J. P./Diener, L./Wichser, A./Bürkle, A./Wick, P.**
Transient DNA damage following exposure to gold nanoparticles. *Nanoscale* 2018, 10 (33), 15723–15735. (joint paper) ▲
- Notter, T./Aengenheister, L./Weber-Stadlbauer, U./Naegeli, H./Wick, P./Meyer, U./Buerki-Thurnherr, T.**
Prenatal exposure to TiO₂ nanoparticles in mice causes behavioral deficits with relevance to autism spectrum disorder and beyond. *Transl. Psychiatry* 2018, 8 (1), 193 (10 pp.). ▲
- Ryabova, A. V./Keevend, K./Tsolaki, E./Bertazzo, S./Pominova, D. V./Romanishkin, I. D./Grachev, P. V./Makarov, V. I./Burmistrov, I. A./Vanetsev, A. S./et al.**
Visualization of Nd³⁺-doped LaF₃ nanoparticles for near infrared bioimaging via upconversion luminescence at multiphoton excitation microscopy. *Biomed. Photonics* 2018, 7 (1), 4–12.
- Spyrogianni, A./Tiefenboeck, P./Starsich, F. H. L./Keevend, K./Krumeich, F./Herrmann, I. K./Leroux, J. C./Sotiriou, G. A.**
Near-UV activated, photostable nanophosphors for in vitro dosimetry and dynamic bioimaging. *AICHE J.* 2018, 64 (8), 2947–2957. ▲
- Starsich, F. H. L./Eberhardt, C./Keevend, K./Boss, A./Hirt, A. M./Herrmann, I. K./Pratsinis, S. E.**
Reduced magnetic coupling in ultrasmall iron oxide T1 MRI contrast agents. *ACS Appl. Bio Mater.* 2018, 1 (3), 783–791.
- Vidmar, J./Buerki-Thurnherr, T./Loeschner, K.**
Comparison of the suitability of alkaline or enzymatic sample pre-treatment for characterization of silver nanoparticles in human tissue by single particle ICP-MS. *J. Anal. At. Spectrom.* 2018, 33 (5), 752–761. ▲
- Vidmar, J./Loeschner, K./Correia, M./Larsen, E. H./Manser, P./Wichser, A./Boodhia, K./Al-Ahmady, Z. S./Ruiz, J./Astruc, D./et al.**
Translocation of silver nanoparticles in the ex vivo human placenta perfusion model characterized by single particle ICP-MS. *Nanoscale* 2018, 10 (25), 11980–11991. (joint paper) ▲
- Bell, H./Grossmann, G./Hippin, C./Lange, B./Wohlrabe, H./Öttl, H.**
Grundlagen des Reflowlötens. Teil 4: Konsequenzen der fortlaufenden Miniaturisierung/Reflow Technologie/Rehm Thermal Systems GmbH: Blaubeuren-Seissen, 2018/204 p.
- Brönnimann, R./Anderegg, P./Meier, U.**
Referenzmessdaten beim Langzeitmonitoring von Infrastrukturen. *Bautechnik* 2018, 95 (7), 494–498. (joint paper) ▲
- Butti, P.**
Graphene three-terminal nanojunction rectifiers. Doctoral dissertation, ETH Zurich, Zürich, 2017, 113 p.
- Butti, P./Brönnimann, R./Enslin, K./Shorubalko, I.**
Joule-heating induced thermal voltages in graphene three-terminal nanojunctions. *Appl. Phys. Lett.* 2018, 112 (13), 133501 (4 pp.). ▲
- Casari, D./Pethö, L./Schürch, P./Brönnimann, R./Philippe, L./Michler, J./Zysset, P./Schwiedrzik, J.**
Tensile properties of bone extracellular matrix at the microscale. Presented at the WCB 2018: 8th world congress of biomechanics, Dublin, Ireland, July 8–12, 2018. (joint paper)
- Dorwling-Carter, L./Aramesh, M./Forró, C./Tiefenauer, R. F./Shorubalko, I./Vörös, J./Zambelli, T.**
Simultaneous scanning ion conductance and atomic force microscopy with a nanopore: effect of the aperture edge on the ion current images. *J. Appl. Phys.* 2018, 124 (17), 174902 (9 pp.). ▲
- García-Suárez, V. M./García-Fuente, A./Carrascal, D. J./Buzurú, E./Koole, M./van der Zant, H. S. J./El Abbassi, M./Calame, M./Ferrer, J.**
Spin signatures in the electrical response of graphene nanogaps. *Nanoscale* 2018, 10 (38), 18169–18177. ▲
- Gesevičius, Donatas/Neels, Antonia/Jenatsch, Sandra/Hack, Erwin/Viani, Lucas/Athanasopoulos, Stavros/Nüesch, Frank/Heier, Jakob**
Increasing photovoltaic performance of an organic cationic chromophore by anion exchange. *Advanced Science* 2018, 1700496 (9 pp.). (joint paper) ▲
- Hack, E./Burguete, R./Dvurecenska, K./Lampeas, G./Patterson, E./Siebert, T./Szigeti, E.**
Steps towards industrial validation experiments. *Proceedings* 2018, 2 (8), 391 (6 pp.). ▲
- Héritier, M./Eichler, A./Pan, Y./Grob, U./Shorubalko, I./Krass, M. D./Tao, Y./Degen, C. L.**
Nanoladder cantilevers made from diamond and silicon. *Nano Lett.* 2018, 18 (3), 1814–1818. ▲
- Lenz, S./Gruenert, U./Geist, J./Stiefel, M./Lentz, M./Raeder, U.**
Calcite production by the calcifying green alga *Phacotus lenticularis*. *J. Limnol.* 2018, 77 (2), 209–219. ▲
- Liao, Yujun/Dimopoulos Eggenschwiler, Panayotis/Furrer, Roman/Wang, Moyu/Boulouchos, Konstantinos**
Heat transfer characteristics of urea-water spray impingement on hot surfaces. *International Journal of Heat and Mass Transfer* 2018, 117, 447–457. (joint paper) ▲
- Madi, M./Ceysens, F./Shorubalko, I./Herzig, H. P./Guldemann, B./Giacari, P.**
Lippmann waveguide spectrometer with enhanced throughput and bandwidth for space and commercial applications. *Opt. Express* 2018, 26 (3), 2682 (26 pp.). ▲
- Marhenke, T./Neuenschwander, J./Furrer, R./Twiefel, J./Hasener, J./Niemz, P./Sanabria, S. J.**
Modeling of delamination detection utilizing air-coupled ultrasound in wood-based composites. *NDT E Int.* 2018, 99, 1–12. ▲
- Marhenke, T./Sanabria, S. J./Twiefel, J./Furrer, R./Hasener, J./Neuenschwander, J./Wallaschek, J.**
Three-dimensional sound field computation and optimization of the delamination detection based on the re-radiation. Presented at the 12th European conference of non-destructive testing (ECNDT 2018), Gothenburg, Sweden, June 11–15, 2018/European Federation for Non-Destructive Testing: Gothenburg/p (9 pp.).

- Molnár, D./Török, T. N./Sánta, B./Gubicza, A./Magyarkuti, A./Hauert, R./Kiss, G./Halbritter, A./Csontos, M.**
In-situ impedance matching in Nb/Nb2O5/PtIr memristive nanojunctions for ultra-fast neuromorphic operation. *Nanoscale* 2018, 10 (41), 19290–19296. (joint paper) ▲
- Nirmalraj, P. N./Thodkar, K./Guerin, S./Calame, M./Thompson, D.**
Graphene wrinkle effects on molecular resonance states. *npj 2D Mater. & Applications* 2018, 2 (1), 8 (7 pp.).
- Rheingans, B./Furrer, R./Neuenschwander, J./Spies, I./Schumacher, A./Knappmann, S./Jeurgens, L. P. H./Janczak-Rusch, J.**
Reactive joining of thermally and mechanically sensitive materials. 2018, 140 (4), 041006 (8 pp.). (joint paper) ▲
- Sanabria, Sergio J./Marhenke, Torben/Furrer, Roman/Neuenschwander, Jürg**
Calculation of volumetric sound field of pulsed air-coupled ultrasound transducers based on single plane measurements. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control* 2018, 65 (1), 72–84.
- Saxena, N./Keilhofer, J./Maurya, A. K./Fortunato, G./Overbeck, J./Müller-Buschbaum, P.**
Facile optimization of thermoelectric properties in PEDOT:PSS thin films through acido-base and redox dedoping using readily available salts. *ACS Appl. Energy Mater.* 2018, 1 (2), 336–342. (joint paper)
- Spies, I./Schumacher, A./Knappmann, S./Dehé, A./Rheingans, B./Furrer, R./Neuenschwander, J./Janczak-Rusch, J./Jeurgens, L. P. H.**
Reactive joining of sensitive materials for MEMS devices: characterization of joint quality. In *Proceedings smart systems integration 2018. International conference & exhibition on integration issues of miniaturized systems-MEMS, NEMS, ICs and electronic components, presented at the Smart systems integration (SSI), Dresden, April 11–12, 2018/Fraunhofer Institute for Electronic Nano Systems: Dresden, 2018/p* (6 pp.). (joint paper)
- Stefani, D./Perrin, M./Gutiérrez-Cerón, C./Aragonès, A. C./Labra-Muñoz, J./Carrasco, R. D. C./Matsushita, Y./Futera, Z./Labuta, J./Ngo, T. H./et al.**
Mechanical tuning of through-molecule conductance in a conjugated calix[4]pyrrole. *Chem. Sel.* 2018, 3 (23), 6473–6478. ▲
- Stefani, D./Weiland, K. J./Skripnik, M./Hsu, C./Perrin, M. L./Mayor, M./Pauly, F./van der Zant, H. S. J.**
Large conductance variations in a mechanosensitive single-molecule junction. *Nano Lett.* 2018, 18 (9), 5981–5988. ▲
- Steiger, R./Fink, G./Nerbano, S./Hack, E./Beyer, K.**
Experimental investigation of friction stresses between adjacent panels made of Oriented Strand Board (OSB) and between OSB panels and glued laminated timber (GLT) frame members. *Mater. Struct.* 2018, 51, 2 (14 pp.). (joint paper) ▲
- Strassel, K./Kaiser, A./Jenatsch, S./Véron, A. C./Anantharaman, S. B./Hack, E./Diethelm, M./Nüesch, F./Aderne, R./Legnani, C./et al.**
Squaraine dye for a visibly transparent all-organic optical upconversion device with sensitivity at 1000 nm. *ACS Appl. Mater. Interfaces* 2018, 10 (13), 11063–11069. (joint paper) ▲
- Stuyver, T./Perrin, M./Geerlings, P./De Proft, F./Alonso, M.**
Conductance switching in expanded porphyrins through aromaticity and topology changes. *J. Am. Chem. Soc.* 2018, 140 (4), 1313–1326. ▲
- Thodkar, K./Schönenberger, C./Calame, M./Lüönd, F./Overney, F./Jeanneret, B.**
Observation of high accuracy resistance quantization in CVD graphene. In 2018 conference on precision electromagnetic measurements (CPEM 2018), presented at the Conference on precision electromagnetic measurements (CPEM), Paris, France, July 8–13, 2018/IEEE: New York, NY, USA, 2018/p (2 pp.).
- Valzania, L./Feurer, T./Zolliker, P./Hack, E.**
Terahertz ptychography. *Opt. Lett.* 2018, 43 (3), 543–546. ▲
- Valzania, L./Hack, E./Zolliker, P./Brönnimann, R./Feurer, T.**
Resolution limits of terahertz ptychography. In *Unconventional optical imaging, presented at the SPIE Photonics Europe, Strasbourg, France, April 22–26, 2018/Fournier, C., Georges, M. P., Popescu, G., Eds./Proceedings of SPIE/SPIE: Bellingham, WA, USA, 2018/Vol. 10677, p 1067720* (8 pp.).
- Viero, Y./Guérin, D./Vladyka, A./Alibart, F./Lenfant, S./Calame, M./Vuillaume, D.**
Light-stimulatable molecules/nanoparticles networks for switchable logical functions and reservoir computing. *Adv. Funct. Mater.* 2018, 28 (39), 1801506 (10 pp.). ▲

Mobility, Energy and Environment

- Brink, M./Schäffer, B./Pieren, R./Wunderli, J. M.**
Conversion between noise exposure indicators Leq24h, LDay, LEvening, LNight, Ldn and Lden: principles and practical guidance. *Int. J. Hyg. Environ. Health* 2018, 221 (1), 54–63. ▲
- Cantuaría, M. L./Usemann, J./Proietti, E./Blanes-Vidal, V./Dick, B./Flück, C. E./Rüedi, S./Héritier, H./Wunderli, J. M./Latzin, P./et al.**
Glucocorticoid metabolites in newborns: a marker for traffic noise related stress? *Environ. Int.* 2018, 117, 319–326. ▲
- Delfs, J./Bertsch, L./Zellmann, C./Rossian, L./Kian Far, E./Ring, T./Langer, S. C.**
Aircraft noise assessment – from single components to large scenarios. *Energies* 2018, 11 (2), 429 (25 pp.). ▲
- Eggenschwiler, K./Sperdin, V./Schoenwald, S.**
Neue Untersuchungen zum Messverfahren zur Simulation haustechnischer Benutzungsgeräusche mit dem Pendel-fallhammer gemäss Schweizer Norm SIA 181 "Schallschutz im Hochbau". In 44. Deutsche Jahrestagung für Akustik, presented at the DAGA 2018, München, Germany, März 19–22, 2018/DEGA, 2018/pp 679–682.

- Eze, I. C./Foraster, M./Schaffner, E./Vienneau, D./Héritier, H./Pieren, R./Thiesse, L./Rudzik, F./Rothe, T./Pons, M./et al.**
Transportation noise exposure, noise annoyance and respiratory health in adults: a repeated-measures study. *Environ. Int.* 2018, 121, 741–750. ▲
- Foraster, M./Eze, I. C./Vienneau, D./Schaffner, E./Jeong, A./Héritier, H./Rudzik, F./Thiesse, L./Pieren, R./Brink, M./et al.**
Long-term exposure to transportation noise and its association with adiposity markers and development of obesity. *Environ. Int.* 2018, 121, 879–889. ▲
- Guski, R./Schreckenberger, D./Brink, M./Isermann, U./Schmid, R./Schäffer, B./Wunderli, J. M.**
Ein projekt zur Re-Analyse von Fluglärm-Belastigungsdaten: Leq+X. In 44. Deutsche Jahrestagung für Akustik, presented at the DAGA 2018, München, Germany, März 19–22, 2018/DEGA, 2018/pp 1372–1375.
- Hannema, G./Tröbs, H. M./Van Damme, B./Zemp, A./Heutschi, K./Lechner, B./Zhang, J./Hecht, M./Sohr, S./Wunderli, J. M.**
Validation of a FEM structure-borne sound radiation model for railway rolling noise. Presented at the NOVEM 2018. Noise and vibration emerging methods, Ibiza, Spain, May 7–9, 2018/p 171595 (9 pp.).
- Héritier, H./Vienneau, D./Foraster, M./Eze, I. C./Schaffner, E./Thiesse, L./Rudzik, F./Habermacher, M./Köpfli, M./Pieren, R./et al.**
Diurnal variability of transportation noise exposure and cardiovascular mortality: a nationwide cohort study from Switzerland. *Int. J. Hyg. Environ. Health* 2018, 221 (3), 556–563. ▲
- Heutschi, K./Locher, B./Gerber, M.**
sonROAD18: Swiss implementation of the CNOSSOS-EU road traffic noise emission model. *Acta Acust. United Acust.* 2018, 104 (4), 697–706. ▲
- Jäger, D./Zellmann, C./Wunderli, J. M./Simons, D. G./Snellen, M.**
Validation of the sonAIR aircraft noise simulation model – a case study for Schiphol Airport. In Proceedings of the Inter-Noise 2018. 47th international congress and exposition on noise control engineering. Impact of noise control engineering, presented at the Inter-Noise 2018. 47th international congress and exposition on noise control engineering. Impact of noise control engineering, Chicago, Illinois, August 26–29, 2018/I-INCE, 2018/p (9 pp.).
- Locher, B./Piquerez, A./Habermacher, M./Ragettli, M./Röösli, M./Brink, M./Cajochen, C./Vienneau, D./Foraster, M./Müller, U./et al.**
Differences between outdoor and indoor sound levels for open, tilted, and closed windows. *Int. J. Environ. Res. Public Health* 2018, 15 (1), 149 (16 pp.). ▲
- Mecking, S./Schanda, U./Schoenwald, S.**
Material characterisation of cross laminated timber using experimental wave velocities. In Proceedings of Euro-noise 2018, presented at the Euronoise 2018, Heraklion, Crete, Greece, May 27–31, 2018/Taroudakis, M., Ed./European Acoustics Association, Helina, 2018/pp 659–666.
- Miniaci, M./Pal, R. K./Morvan, B./Ruzzene, M.**
Experimental observation of topologically protected helical edge modes in patterned elastic plates. *Phys. Rev. X* 2018, 8 (3), 031074 (9 pp.). ▲
- Pieren, R.**
Auralization of environmental acoustical sceneries. Synthesis of road traffic, railway and wind turbine noise. Doctoral dissertation, Delft University of Technology, Delft, 2018, 162 p.
- Pieren, R./Bertsch, L./Blinstrub, J./Schäffer, B./Wunderli, J. M.**
Simulation process for perception-based noise optimization of conventional and novel aircraft concepts. In 2018 AIAA aerospace sciences meeting, presented at the 2018 AIAA aerospace sciences meeting, Kissimmee, FL, USA, January 08–12, 2018/AIAA SciTech Forum/American Institute of Aeronautics and Astronautics (AIAA): Reston, VA, USA, 2018/pp AIAA 2018–0266 (13 pp.).
- Pieren, R./Lauper, D./Heutschi, K.**
Demonstrator for rail vehicle pass-by events. In Proceedings of Euronoise 2018, presented at the Euronoise 2018, Heraklion, Crete, Greece, May 27–31, 2018/Taroudakis, M., Ed./European Acoustics Association/Helina, 2018/pp 1409–1414.
- Pieren, Reto/Schäffer, Beat/Schoenwald, Stefan/Eggenschwiler, Kurt**
Sound absorption of textile curtains – theoretical models and validations by experiments and simulations. *Textile Research Journal* 2018, 88 (1), 36–48. ▲
- Poulikakos, L./Heutschi, K./Soltic, P./Cerny, I./Lees, A./van Loo, H./Mayer, R.**
Defining road and rail vehicles with a low environmental footprint. Final report/2018/34 p. (joint paper)
- Ribe, R.G./Manyoky, M./Wissen Hayek, U./Pieren, R./Heutschi, K./Grêt-Regamey, A.**
Dissecting perceptions of wind energy projects: a laboratory experiment using high-quality audio-visual simulations to analyze experiential versus acceptability ratings and information effects. *Landscape and Urban Planning* 2018, 169, 131–147. ▲
- Röösli, M./Wunderli, J. M./Brink, M./Cajochen, C./Vienneau, D./Foraster, M./Eze, I. C./Héritier, H./Schaffner, E./Thiesse, L./et al.**
SiRENE: Kurz- und langfristige Auswirkungen der Verkehrslärmbelastung. In 44. Deutsche Jahrestagung für Akustik, presented at the DAGA 2018, München, Germany, März 19–22, 2018/DEGA, 2018/pp 1362–1364.
- Rudzik, F./Thiesse, L./Pieren, R./Wunderli, J. M./Brink, M./Foraster, M./Héritier, H./Eze, I. C./Garbaza, C./Vienneau, D./et al.**
Sleep spindle characteristics and arousability from nighttime transportation noise exposure in healthy young and older individuals. *Sleep* 2018, 41 (7), zsy077 (14 pp.). ▲

Schäffer, B./Pieren, R./Schlittmeier, S. J./Brink, M.

Effects of different spectral shapes and amplitude modulation of broadband noise on annoyance reactions in a controlled listening experiment. *Int. J. Environ. Res. Public Health* 2018, 15 (5), 1029 (17 pp.). ▲

Schlatter, F./Wunderli, J. M./Köpfl, M.

Relevance of buildings in aircraft noise predictions. In Proceedings of the Inter-Noise 2018. 47th international congress and exposition on noise control engineering. Impact of noise control engineering, presented at the Inter-Noise 2018. 47th international congress and exposition on noise control engineering. Impact of noise control engineering, Chicago, Illinois, August 26–29, 2018/I-INCE, 2018/p (10 pp.).

Schoenwald, S./Tröbs, H. M.

Assessment of structure-borne sound intensity of solid wood walls using a scanning laser Doppler-vibrometer. In Proceedings of Euronoise 2018, presented at the Euronoise 2018, Heraklion, Crete, Greece, May 27–31, 2018/Taroudakis, M., Ed./European Acoustics Association/Helina, 2018/pp 633–640.

Sievers, T./Eggenschwiler, K./Taghipour, A./Blau, M.

Untersuchungen zur raumakustischen Aufenthaltsqualität in Innenhöfen von Wohnbauten. Presented at the DAGA 2018, München, Germany, March 19–22, 2018/DEGA/pp 1038–1041.

Sohr, S./Hecht, M./Zhang, J./Lechner, B./Hannema, G./Zemp, A./Wunderli, J. M.

Entwicklung eines Simulationstools zur Auslegung lärmarmen Gleiskonstruktionen. *ZEVrail Glasers Ann.* 2018, 142 (10), 400–409.

Thiesse, L./Rudzik, F./Spiegel, K./Leproult, R./Pieren, R./Wunderli, J. M./Foraster, M./Héritier, H./Eze, I. C./Meyer, M./et al.

Adverse impact of nocturnal transportation noise on glucose regulation in healthy young adults: effect of different noise scenarios. *Environ. Int.* 2018, 121, 1011–1023. ▲

Van Damme, B./Van Den Abeele, K.

Nonlinear resonant acoustic spectroscopy. In Handbook of advanced non-destructive evaluation/Ida, N., Meyendorf, N., Eds./Springer: Cham, 2018/pp 1–29.

Van Damme, B./Zemp, A.

Energy distribution and exchange between spatial harmonics in bending wave phononic crystals. *Phys. Rev. App.* 2018, 10 (1), 014001 (7 pp.). ▲

Van Damme, B./Zemp, A.

Measuring dispersion curves for bending waves in beams: a comparison of spatial fourier transform and inhomogeneous wave correlation. *Acta Acust. United Acust.* 2018, 104 (2), 228–234. ▲

Wissen Hayek, Ulrike/Pieren, Reto/Heutschi, Kurt/Manyoky, Madeleine/Grêt-Regamey, Adrienne

Exploring the qualities of GIS-based visual-acoustic simulations of wind parks to support public opinion forming. In Yamu, Claudia/Poplin, Alenka/Devisch, Oswald/de Roo, Gert (Eds.), *The virtual and the real in planning and urban design. Perspectives, practices and applications 2018* (pp. 233–251).

Wunderli, J. M./Zellmann, C./Köpfl, M./Habermacher, M./Schwab, O./Schlatter, F./Schäffer, B.

sonAIR – a GIS-integrated spectral aircraft noise simulation tool for single flight prediction and noise mapping. *Acta Acust. United Acust.* 2018, 104 (3), 440–451. ▲

Zellmann, C.

Development of an aircraft noise emission model accounting for flight parameters. Doctoral dissertation, Technische Universität Berlin, Berlin, 2018, 168 p.

Zellmann, C./Jäger, D./Schlatter, F.

Model adjustment and validation to account for the airflow deflector retrofit of the A320 family. In Proceedings of Euronoise 2018, presented at the Euronoise 2018, Heraklion, Crete, Greece, May 27–31, 2018/Taroudakis, M., Ed./European Acoustics Association/Helina, 2018/pp 225–230.

Zellmann, C./Schäffer, B./Wunderli, J. M./Isermann, U./Paschereit, C. O.

(2018). Aircraft noise emission model accounting for aircraft flight parameters. *Journal of Aircraft* 2018, 55 (2), 682–695 ▲

Aengenheister, L./Dietrich, D./Sadeghpour, A./Manser, P./Diener, L./Wichser, A./Karst, U./Wick, P./Buerki-Thurnherr, T.

Gold nanoparticle distribution in advanced in vitro and ex vivo human placental barrier models. *J. Nanobiotechnol.* 2018, 16 (1), 79 (16 pp.). (joint paper) ▲

Andres, C./Schwarz, T./Haass, S. G./Weiss, T. P./Carron, R./Caballero, R./Figli, R./Schreiner, C./Bürki, M./Tiwari, A. N./et al.

Decoupling of optoelectronic properties from morphological changes in sodium treated kesterite thin film solar cells. *Sol. Energy* 2018, 175, 94–100. (joint paper) ▲

Atkinson, D. B./Pekour, M./Chand, D./Radney, J. G./Kolesar, K. R./Zhang, Q./Setyan, A./O'Neill, N. T./Cappa, C. D.

Using spectral methods to obtain particle size information from optical data: applications to measurements from CARES 2010. *Atmos. Chem. Phys.* 2018, 18 (8), 5499–5514. ▲

Barbato, F./Bleiner, D.

Plasma-source high-resolution XUV spectroscopy as complementary to beamlines limitations. In X-ray lasers 2016. Proceedings of the 15th international conference on X-ray lasers, presented at the 15th international conference on X-ray lasers. ICXRL 2016, Nara, Japan, May 22–27, 2016/Kawachi, T., Bulanov, S. V., Daido, H., Kato, Y., Eds./Springer proceedings in physics/Springer: Cham, Switzerland, 2018/Vol. 202, pp 29–35.

- Cabas-Vidani, A./Haass, S. G./Andres, C./Caballero, R./Figli, R./Schreiner, C./Márquez, J. A./Hages, C./U-nold, T./Bleiner, D./et al.**
High-efficiency $(\text{Li}_x\text{Cu}_{1-x})_2\text{ZnSn}(\text{S},\text{Se})_4$ kesterite solar cells with lithium alloying. *Adv. Energy Mater.* 2018, 8 (34), 1801191 (8 pp.). (joint paper) ▲
- Carron, R./Avancini, E./Feurer, T./Bissig, B./Losio, P. A./Figli, R./Schreiner, C./Bürki, M./Bourgeois, E./Remes, Z./et al.**
Refractive indices of layers and optical simulations of $\text{Cu}(\text{In},\text{Ga})\text{Se}_2$ solar cells. *Sci. Technol. Adv. Mater.* 2018, 19 (1), 396–410. (joint paper) ▲
- Cattaneo, L./Vos, J./Bello, R. Y./Palacios, A./Heuser, S./Pedrelli, L./Lucchini, M./Cirelli, C./Martín, F./Keller, U.**
Attosecond coupled electron and nuclear dynamics in dissociative ionization of H_2 . *Nat. Phys.* 2018, 14, 733–738. ▲
- Cholakian, A./Beekmann, M./Colette, A./Coll, I./Siour, G./Sciare, J./Marchand, N./Couvidat, F./Pey, J./Gros, V./et al.**
Simulation of fine organic aerosols in the western Mediterranean area during the ChArMEx 2013 summer campaign. *Atmos. Chem. Phys.* 2018, 18 (10), 7287–7312. ▲
- Cirelli, C./Marante, C./Heuser, S./Pettersson, C. L. M./Galán, Á. J./Argenti, L./Zhong, S./Busto, D./Isinger, M./Nandi, S./et al.**
Anisotropic photoemission time delays close to a Fano resonance. *Nat. Commun.* 2018, 9, 955 (9 pp.). ▲
- Cristoforetti, G./Antonelli, L./Atzeni, S./Baffigi, F./Barbato, F./Batani, D./Boutoux, G./Colaitis, A./Dostal, J./Dudzak, R./et al.**
Measurements of parametric instabilities at laser intensities relevant to strong shock generation. *Phys. Plasmas* 2018, 25 (1), 012702 (12 pp.). ▲
- Delmelle, R./Terreni, J./Remhof, A./Heel, A./Proost, J./Borgschulte, A.**
Evolution of water diffusion in a sorption-enhanced methanation catalyst. *Catalysts* 2018, 8 (9), 341 (15 pp.). (joint paper) ▲
- Glüge, J./Schinkel, L./Hungerbühler, K./Cariou, R./Bogdal, C.**
Environmental risks of medium-chain chlorinated paraffins (MCCPs): a review. *Environ. Sci. Technol.* 2018, 52 (12), 6743–6760. ▲
- Haass, S. G./Andres, C./Figli, R./Schreiner, C./Bürki, M./Tiwari, A. N./Romanyuk, Y. E.**
Effects of potassium on kesterite solar cells: similarities, differences and synergies with sodium. *AIP Adv.* 2018, 8 (1), 015133 (11 pp.). (joint paper) ▲
- Haass, Stefan G./Andres, Christian/Figli, Renato/Schreiner, Claudia/Bürki, Melanie/Romanyuk, Yaroslav E./Tiwari, Ayodhya N.**
Complex interplay between absorber composition and alkali doping in high-efficiency kesterite solar cells. *Advanced Energy Materials* 2018, 8 (4) (joint paper) ▲
- Heeb, N. V./Mazenauer, M./Wyss, S./Geueke, B./Kohler, H. P. E./Lienemann, P.**
Kinetics and stereochemistry of LinB -catalyzed δ -HBCD transformation: comparison of in vitro and in silico results. *Chemosphere* 2018, 207, 118–129. (joint paper) ▲
- Iswar, S./Snellings, G. M. B. F./Zhao, S./Erni, R./Bahk, Y. K./Wang, J./Lattuada, M./Koebel, M. M./Malfait, W. J.**
Reinforced and superinsulating silica aerogel through in situ cross-linking with silane terminated prepolymers. *Acta Mater.* 2018, 147, 322–328. (joint paper) ▲
- Kammermann, T./Kreutner, W./Trottmann, M./Merotto, L./Soltic, P./Bleiner, D.**
Spark-induced breakdown spectroscopy of methane/air and hydrogen-enriched methane/air mixtures at engine relevant conditions. *Spectrochim. Acta B* 2018, 148, 152–164. (joint paper) ▲
- Kılıç, D./El Haddad, I./Brem, B. T./Bruns, E./Bozetti, C./Corbin, J./Durdina, L./Huang, R. J./Jiang, J./Klein, F./et al.**
Identification of secondary aerosol precursors emitted by an aircraft turbofan. *Atmos. Chem. Phys.* 2018, 18 (10), 7379–7391. ▲
- Li, J./Cao, J./Zhu, Yguan/Chen, Qlin/Shen, F./Wu, Y./Xu, S./Fan, H./Da, G./Huang, Rjin/et al.**
Global survey of antibiotic resistance genes in air. *Environ. Sci. Technol.* 2018, 52 (19), 10975–10984. ▲
- Massei, R./Busch, W./Wolschke, H./Schinkel, L./Bitsch, M./Schulze, T./Krauss, M./Brack, W.**
Screening of pesticide and biocide patterns as risk drivers in sediments of major European river mouths: ubiquitous or river basin-specific contamination? *Environ. Sci. Technol.* 2018, 52 (4), 2251–2260. ▲
- May, S./Hirsch, C./Rippl, A./Bohmer, N./Kaiser, J. P./Diener, L./Wichser, A./Bürkle, A./Wick, P.**
Transient DNA damage following exposure to gold nanoparticles. *Nanoscale* 2018, 10 (33), 15723–15735. (joint paper) ▲
- Merriam, T./Kaufmann, R./Ebert, L./Figli, R./Erni, R./Pauer, R./Sieberth, T.**
Differentiation of dental restorative materials combining energy-dispersive X-ray fluorescence spectroscopy and post-mortem CT. *Forensic Sci. Med. Pathol.* 2018, 14 (2), 163–173. (joint paper) ▲
- Müller, R./Kuznetsov, I./Arbelo, Y./Trottmann, M./Menoni, C. S./Rocca, J. J./Patzke, G. R./Bleiner, D.**
Depth-profiling microanalysis of CoNCN water-oxidation catalyst using a $\lambda = 46.9$ nm plasma laser for nano-ionization mass spectrometry. *Anal. Chem.* 2018, 90 (15), 9234–9240. ▲
- Muñoz, M./Haag, R./Honegger, P./Zeyer, K./Mohn, J./Comte, P./Czerwinski, J./Heeb, N. V.**
Co-formation and co-release of genotoxic PAHs, alkyl-PAHs and soot nanoparticles from gasoline direct injection vehicles. *Atmos. Environ.* 2018, 178, 242–254. (joint paper) ▲

- Muñoz, M./Haag, R./Zeyer, K./Mohn, J./Comte, P./Czerwinski, J./Heeb, N. V.**
Effects of four prototype gasoline particle filters (GPFs) on nanoparticle and genotoxic PAH emissions of a gasoline direct injection (GDI) vehicle. *Environ. Sci. Technol.* 2018, 52 (18), 10709–10718. ▲
- Patterson, B. D.**
Ultrafast science. In *Structures on different time scales*/Woike, T., Schaniel, D., Eds./De Gruyter: Berlin, 2018/pp 221–268.
- Pieber, S. M./Kumar, N. K./Klein, F./Comte, P./Bhattu, D./Dommen, J./Brunns, E. A./Kılıç, D./El Haddad, I./Keller, A./et al.**
Gas-phase composition and secondary organic aerosol formation from standard and particle filter-retrofitted gasoline direct injection vehicles investigated in a batch and flow reactor. *Atmos. Chem. Phys.* 2018, 18 (13), 9929–9954. (joint paper) ▲
- Pikuz, T. A./Faenov, Y./Matsuoka, T./Albertazzi, B./Ozaki, N./Hartely, N./Muray Ricardo Arturo, O./Yabuuchi, T./Habara, H./Matsuyama, S./et al.**
In situ characterization of XFEL beam intensity distribution and focusability by high-resolution LiF crystal detector. In *X-ray lasers 2016. Proceedings of the 15th international conference on X-ray lasers, presented at the 15th international conference on X-ray lasers. ICXRL 2016, Nara, Japan, May 22–27, 2016*/Kawachi, T., Bulanov, S. V., Daido, H., Kato, Y., Eds./Springer proceedings in physics/Springer: Cham, Switzerland, 2018/Vol. 202, pp 109–115.
- Poulikakos, L./Zaumanis, M./Cavalli, M. C./Munoz Fernandez, M./Heeb, N.**
Sustainable fully recycled asphalt concrete. Final report/sine nomine, 2018/80 p. (joint paper)
- Ruiz-Lopez, M./Dacasa, H./Mahieu, B./Lozano, M./Li, L./Zeitoun, P./Bleiner, D.**
Non-contact XUV metrology of Ru/B4C multilayer optics by means of Hartmann wavefront analysis. *Appl. Opt.* 2018, 57 (6), 1315–1320. ▲
- Sachinidou, P./Heuschling, C./Schaniel, J./Wang, J.**
Investigation of surface potential discharge mechanism and kinetics in dielectrics exposed to different organic solvents. *Polymer* 2018, 145, 447–453. ▲
- Sambalova, O./Borgschulte, A.**
Membrane concept for environmental surface science. *J. Alloys Compd.* 2018, 742, 518–523. ▲
- Sambalova, O./Thorwarth, K./Heeb, N. V./Bleiner, D./Zhang, Y./Borgschulte, A./Kroll, A.**
Carboxylate functional groups mediate interaction with silver nanoparticles in biofilm matrix. *ACS Omega* 2018, 3 (1), 724–733. (joint paper)
- Schinkel, L./Lehner, S./Heeb, N. V./Marchand, P./Cariou, R./McNeill, K./Bogdal, C.**
Dealing with strong mass interferences of chlorinated paraffins and their transformation products: an analytical guide. *Trends Analyt. Chem.* 2018, 106, 116–124. ▲
- Schinkel, Lena/Lehner, Sandro/Knobloch, Marco/Lienemann, Peter/Bogdal, Christian/McNeill, Kristopher/Heeb, Norbert V.**
Transformation of chlorinated paraffins to olefins during metal work and thermal exposure – Deconvolution of mass spectra and kinetics. *Chemosphere* 2018, 194, 803–811. ▲
- Servalli, M./Celebi, K./Payamyar, P./Zheng, L./Položij, M./Lowe, B./Kuc, A./Schwarz, T./Thorwarth, K./Borgschulte, A./et al.**
Photochemical creation of covalent organic 2D monolayer objects in defined shapes via a lithographic 2D polymerization. *ACS Nano* 2018, 12 (11), 11294–11306. ▲
- Steiner, S./Lothenbach, B./Borgschulte, A./Proske, T./Winnefeld, F.**
Effect of relative humidity on the carbonation rate of portlandite, calcium silicate hydrates and ettringite. Presented at the 20. internationale Baustofftagung (ibausil), Weimar, Germany, September 12–14, 2018/p (6 pp.). (joint paper)
- Strobel, Anneli/Schmid, Peter/Burkhardt-Holm, Patricia/Segner, Helmut/Zennegg, Markus**
Persistent organic pollutants in red- and white-blooded High-Antarctic notothenioid fish from the remote Weddell Sea. *Chemosphere* 2018, 193, 213–222. ▲
- Sun, Z./Tang, M./Song, Q./Yu, J./Liang, Y./Hu, J./Wang, J.**
Filtration performance of air filter paper containing kapok fibers against oil aerosols. *Cellulose* 2018, 25 (11), 6719–6729. ▲
- Terreni, J./Trottmann, M./Delmelle, R./Heel, A./Trtik, P./Lehmann, E. H./Borgschulte, A.**
Observing chemical reactions by time-resolved high-resolution neutron imaging. *J. Phys. Chem. C* 2018, 122 (41), 23574–23581. ▲
- Trottmann, M./Wichser, A./Arnold, M./Bleiner, D.**
Space resolved detection of Iodine (I) & Potassium (K) in treated wooden samples. Presented at the SCS Fall Meeting 2018, Lausanne, September 7, 2018. (joint paper)
- Vidmar, J./Loeschner, K./Correia, M./Larsen, E. H./Manser, P./Wichser, A./Boodhia, K./Al-Ahmady, Z. S./Ruiz, J./Astruc, D./et al.**
Translocation of silver nanoparticles in the ex vivo human placenta perfusion model characterized by single particle ICP-MS. *Nanoscale* 2018, 10 (25), 11980–11991. (joint paper) ▲
- Vitas, S./Keplinger, T./Reichholf, N./Figi, R./Cabane, E.**
Functional lignocellulosic material for the remediation of copper(II) ions from water: towards the design of a wood filter. *J. Hazard. Mater.* 2018, 355, 119–127. (joint paper) ▲
- Vos, J./Cattaneo, L./Patchkovskii, S./Zimmermann, T./Cirelli, C./Lucchini, M./Kheifets, A./Landsman, A. S./Keller, U.**
Orientation-dependent stereo Wigner time delay and electron localization in a small molecule. *Science* 2018, 360 (6395), 1326–1330. ▲

Winnefeld, F./Hargis, C. W./Steiner, S./Kaufmann, J./Borgschulte, A./Marchi, M./Allevi, S./Lothenbach, B.

Carbonation resistance of calcium sulfoaluminate cement mortars. Presented at the Conference to celebrate the centennial of LMC and Karen Scrivener's 60th birthday, Lausanne, Switzerland, August 19–22, 2018/EPFL: Lausanne/p (4 pp.). **(joint paper)**

Winnefeld, F./Hargis, C. W./Steiner, S./Kaufmann, J./Borgschulte, A./Marchi, M./Allevi, S./Lothenbach, B.

Carbonatisierungswiderstand von Mörteln auf Basis Calciumsulfoaluminatzement. Presented at the 20. Internationale Baustofftagung (ibausil), Weimar, Germany, September 12–14, 2018/Bauhaus-Universität Weimar: Weimar/p (8 pp.). **(joint paper)**

Yue, Y./Chen, H./Setyan, A./Elser, M./Dietrich, M./Li, J./Zhang, T./Zhang, X./Zheng, Y./Wang, J./et al.
Size-resolved endotoxin and oxidative potential of ambient particles in Beijing and Zürich. *Environ. Sci. Technol.* 2018, 52 (12), 6816–6824. ▲

Zennegg, M.

Dioxins and PCBs in meat – still a matter of concern? *Chimia* 2018, 72 (10), 690–696. ▲

Altstädter, B./Platis, A./Jähn, M./Baars, H./Lückerath, J./Held, A./Lampert, A./Bange, J./Hermann, M./Wehner, B.

Airborne observations of newly formed boundary layer aerosol particles under cloudy conditions. *Atmos. Chem. Phys.* 2018, 18 (11), 8249–8264. ▲

Baró, R./Jiménez-Guerrero, P./Stengel, M./Brunner, D./Curci, G./Forkel, R./Neal, L./Palacios-Peña, L./Savage, N./Schaap, M./et al.

Evaluating cloud properties in an ensemble of regional online coupled models against satellite observations. *Atmos. Chem. Phys.* 2018, 18 (20), 15183–15199. ▲

Bereiter, B./Kawamura, K./Severinghaus, J. P.

New methods for measuring atmospheric heavy noble gas isotope and elemental ratios in ice core samples. *Rapid Commun. Mass Spectrom.* 2018, 32 (10), 801–814. ▲

Bereiter, Bernhard/Shackleton, Sarah/Baggenstos, Daniel/Kawamura, Kenji/Severinghaus, Jeff

Mean global ocean temperatures during the last glacial transition. *Nature* 2018, 553 (7686), 39–44. ▲

Bergamaschi, P./Danila, A./Weiss, R. F./Ciais, P./Thompson, R. L./Brunner, D./Levin, I./Meijer, Y./Chevalier, F./Janssens-Maenhout, G./et al.

Atmospheric monitoring and inverse modelling for verification of greenhouse gas inventories/JRC Science for policy report/Report No.: EUR 29276 EN/Publications Office of the European Union: Luxembourg, 2018/109 p.

Bergamaschi, P./Karstens, U./Manning, A. J./Saunois, M./Tsuruta, A./Berchet, A./Vermeulen, A. T./Arnold, T./Janssens-Maenhout, G./Hammer, S./et al.

Inverse modelling of European CH₄ emissions during 2006–2012 using different inverse models and reassessed atmospheric observations. *Atmos. Chem. Phys.* 2018, 18 (2), 901–920. ▲

Bigi, A./Mueller, M./Grange, S. K./Ghermandi, G./Hueglin, C.

Performance of NO, NO₂ low cost sensors and three calibration approaches within a real world application. *Atmos. Meas. Tech.* 2018, 11, 3717–3735. ▲

Boleti, E./Hueglin, C./Takahama, S.

Ozone time scale decomposition and trend assessment from surface observations in Switzerland. *Atmos. Environ.* 2018, 191, 440–451. ▲

Bovey, F./Cros, J./Tuzson, B./Seyssel, K./Schneiter, P./Emmenegger, L./Tappy, L.

Breath acetone as a marker of energy balance: an exploratory study in healthy humans. *Nutr. Diabetes* 2018, 8 (1), 50 (4 pp.). ▲

Conen, F./Bukowiecki, N./Gysel, M./Steinbacher, M./Fischer, A./Reimann, S.

Low number concentration of ice nucleating particles in an aged smoke plume. *Q. J. R. Meteorol. Soc.* 2018, 144 (715), 1991–1994. ▲

Crotwell, Andrew/Steinbacher, Martin

19th WMO/IAEA meeting on carbon dioxide, other greenhouse gases and related measurement techniques (GGMT-2017), 19th WMO/IAEA meeting on carbon dioxide, other greenhouse gases, and related measurement techniques (GGMT-2017), Dübendorf, Switzerland, August 27–31, 2017/ Crotwell, A., Steinbacher, M., Eds./GAW Report, Vol. 242/WMO: Geneva, 2018/134 p.

Dalsøren, S. B./Myhre, G./Hodnebrog, Ø./Myhre, C. L./Stohl, A./Pisso, I./Schwietzke, S./Höglund-Isaksson, L./Helmig, D./Reimann, S./et al.

Discrepancy between simulated and observed ethane and propane levels explained by underestimated fossil emissions. *Nat. Geosci.* 2018, 11 (3), 178–184. ▲

Eggleston, S./Galbraith, E. D.

The devil's in the disequilibrium: multi-component analysis of dissolved carbon and oxygen changes under a broad range of forcings in a general circulation model. *Biogeosciences* 2018, 15 (12), 3761–3777. ▲

El Yazidi, A./Ramonet, M./Ciais, P./Broquet, G./Pison, I./Abbaris, A./Brunner, D./Conil, S./Delmotte, M./Gheusi, F./et al.

Identification of spikes associated with local sources in continuous time series of atmospheric CO, CO₂ and CH₄. *Atmos. Meas. Tech.* 2018, 11 (3), 1599–1614. ▲

Elser, M./El-Haddad, I./Maasikmets, M./Bozzetti, C./Wolf, R./Ciarelli, G./Slowik, J. G./Richter, R./Teinemaa, E./Hüglin, C./et al.

High contributions of vehicular emissions to ammonia in three European cities derived from mobile measurements. *Atmos. Environ.* 2018, 175, 210–220. ▲

Eyer, S.
Real-time analysis of $\delta^{13}\text{C}$ - and δD - CH_4 in ambient air with laser spectroscopy: method development, validation and applications. Doctoral dissertation, Universität Bern, Bern, 2016, 95 p.

Fiore, A. M./Fischer, E. V./Milly, G. P./Pandey Deolal, S./Wild, O./Jaffe, D. A./Stahelin, J./Clifton, O. E./Bergmann, D./Collins, W./et al.
Peroxy acetyl nitrate (PAN) measurements at northern midlatitude mountain sites in April: a constraint on continental source-receptor relationships. *Atmos. Chem. Phys.* 2018, 18 (20), 15345–15361. ▲

García, O. E./Schneider, M./Ertl, B./Sepúlveda, E./Borger, C./Diekmann, C./Wiegele, A./Hase, F./Barthlott, S./Blumenstock, T./et al.
The MUSICA IASI CH_4 and N_2O products and their comparison to HIPPO, GAW and NDACC FTIR references. *Atmos. Meas. Tech.* 2018, 11 (7), 4171–4215. ▲

Gaudel, A./Cooper, O. R./Ancellet, G./Barret, B./Boynard, A./Burrows, J. P./Clerbaux, C./Coheur, P. F./Cuesta, J./Cuevas, E./et al.
Tropospheric ozone assessment report: present-day distribution and trends of tropospheric ozone relevant to climate and global atmospheric chemistry model evaluation. *Elementa: Sci. Anthropocene* 2018, 6 (2–s2.0–85053711818), 39 (58 pp.). ▲

Graf, M./Emmenegger, L./Tuzson, B.
Compact, circular, and optically stable multipass cell for mobile laser absorption spectroscopy. *Opt. Lett.* 2018, 43 (11), 2434–2437. ▲

Grange, S. K./Carslaw, D. C./Lewis, A. C./Boleti, E./Hueglin, C.
Random forest meteorological normalisation models for Swiss PM_{10} trend analysis. *Atmos. Chem. Phys.* 2018, 18 (9), 6223–6239. ▲

Groot Zwaaftink, C. D./Henne, S./Thompson, R. L./Dlugokencky, E. J./Machida, T./Paris, J. D./Sasakawa, M./Segers, A./Sweeney, C./Stohl, A.
Three-dimensional methane distribution simulated with FLEXPART 8-CTM-1.1 constrained with observation data. *Geosci. Model Dev.* 2018, 11 (11), 4469–4487. ▲

Guillevic, M./Vollmer, M. K./Wyss, S. A./Leuenberger, D./Ackermann, A./Pascale, C./Niederhauser, B./Reimann, S.
Dynamic-gravimetric preparation of metrologically traceable primary calibration standards for halogenated greenhouse gases. *Atmos. Meas. Tech.* 2018, 11 (6), 3351–3372. ▲

Heeb, N. V./Mazenauer, M./Wyss, S./Geueke, B./Kohler, H. P. E./Lienemann, P.
Kinetics and stereochemistry of LinB-catalyzed δ -HBCD transformation: comparison of in vitro and in silico results. *Chemosphere* 2018, 207, 118–129. (joint paper) ▲

Hugener, M./Mohn, J./Zeyer, K.
Reduced emissions of warm mix asphalt during construction. Presented at the ISAP conference 2018, Fortaleza, Brazil, June 19–21, 2018/pp 1–7. (joint paper)

Hundt, P. M./Tuzson, B./Aseev, O./Liu, C./Scheidegger, P./Looser, H./Kapsalidis, F./Shahmohammadi, M./Faist, J./Emmenegger, L.
Multi-species trace gas sensing with dual-wavelength QCLs. *Appl. Phys. B* 2018, 124 (6), 108 (9 pp.). ▲

Ibraim, Erkan/Harris, Eliza/Eyer, Simon/Tuzson, Béla/Emmenegger, Lukas/Six, Johan/Mohn, Joachim
Development of a field-deployable method for simultaneous, real-time measurements of the four most abundant N_2O isotopocules*. *Isotopes in Environmental and Health Studies* 2018, 54 (1) 1–15 ▲

Kapsalidis, F./Shahmohammadi, M./Süess, M. J./Wolf, J. M./Gini, E./Beck, M./Hundt, M./Tuzson, B./Emmenegger, L./Faist, J.
Dual-wavelength DFB quantum cascade lasers: sources for multi-species trace gas spectroscopy. *Appl. Phys. B* 2018, 124 (6), 107 (17 pp.). ▲

Lacher, L./DeMott, P. J./Levin, E. J. T./Suski, K. J./Boose, Y./Zipori, A./Herrmann, E./Bukowiecki, N./Steinbacher, M./Gute, E./et al.
Background free-tropospheric ice nucleating particle concentrations at mixed-phase cloud conditions. *J. Geophys. Res. D* 2018, 123 (18), 10506–10525. ▲

Lacher, L./Steinbacher, M./Bukowiecki, N./Herrmann, E./Zipori, A./Kanji, Z.
Impact of air mass conditions and aerosol properties on ice nucleating particle concentrations at the high altitude research station Jungfrauoch. *Atmosphere* 2018, 9 (9), 363 (25 pp.). ▲

Liu, C./Tuzson, B./Scheidegger, P./Looser, H./Bereiter, B./Graf, M./Hundt, M./Aseev, O./Maas, D./Emmenegger, L.
Laser driving and data processing concept for mobile trace gas sensing: design and implementation. *Rev. Sci. Instrum.* 2018, 89 (6), 065107 (9 pp.). ▲

Lung, S. C. C./Jones, R./Zellweger, C./Karpinnen, A./Penza, M./Dye, T./Hüglin, C./Ning, Z./Lewis, A. C./von Schneidmesser, E./et al.
Low-cost sensors for the measurement of atmospheric composition: overview of topic and future applications/Report No.: 1215/World Meteorological Organization WMO: Geneva, 2018/46 p.

Lunt, M. F./Park, S./Li, S./Henne, S./Manning, A. J./Ganesan, A. L./Simpson, I. J./Blake, D. R./Liang, Q./O'Doherty, S./et al.
Continued emissions of the ozone-depleting substance carbon tetrachloride from Eastern Asia. *Geophys. Res. Lett.* 2018, 45 (20), 11423–11430. ▲

Mohn, J./Zeyer, K./Keck, M./Keller, M./Zähner, M./Poteko, J./Emmenegger, L./Schrade, S.
A dual tracer ratio method for comparative emission measurements in an experimental dairy housing. *Atmos. Environ.* 2018, 179, 12–22. ▲

- Morten Hundt, P./Müller, M./Mangold, M./Tuzson, B./Scheidegger, P./Looser, H./Hüglin, C./Emmenegger, L.**
Mid-IR spectrometer for mobile, real-time urban NO₂ measurements. *Atmos. Meas. Tech.* 2018, 11 (5), 2669–2681. ▲
- Muñoz, M./Haag, R./Honegger, P./Zeyer, K./Mohn, J./Comte, P./Czerwinski, J./Heeb, N. V.**
Co-formation and co-release of genotoxic PAHs, alkyl-PAHs and soot nanoparticles from gasoline direct injection vehicles. *Atmos. Environ.* 2018, 178, 242–254. (joint paper) ▲
- Ostrom, N. E./Gandhi, H./Coplen, T. B./Toyoda, S./Böhlke, J. K./Brand, W. A./Casciotti, K. L./Dyckmans, J./Giesemann, A./Mohn, J./et al.**
Preliminary assessment of stable nitrogen and oxygen isotopic composition of USGS51 and USGS52 nitrous oxide reference gases and perspectives on calibration needs. *Rapid Commun. Mass Spectrom.* 2018, 32 (15), 1207–1214. ▲
- Palacios-Peña, L./Baró, R./Baklanov, A./Balzarini, A./Brunner, D./Forkel, R./Hirtl, M./Honzak, L./López-Romero, J. M./Montávez, J. P./et al.**
An assessment of aerosol optical properties from remote-sensing observations and regional chemistry-climate coupled models over Europe. *Atmos. Chem. Phys.* 2018, 18 (7), 5021–5043. ▲
- Park, S./Li, S./Mühle, J./O'Doherty, S./Weiss, R. F./Fang, X./Reimann, S./Prinn, R. G.**
Toward resolving the budget discrepancy of ozone-depleting carbon tetrachloride (CCl₄): an analysis of top-down emissions from China. *Atmos. Chem. Phys.* 2018, 18 (16), 11729–11738. ▲
- Petetin, H./Jeoffrion, M./Sauvage, B./Athier, G./Blot, R./Boulanger, D./Clark, H./Cousin, J. M./Gheusi, F./Nedelec, P./et al.**
Representativeness of the IAGOS airborne measurements in the lower troposphere. *Elementa: Sci. Anthropocene* 2018, 6 (1), 23 (24 pp.). ▲
- Pieber, S. M./Kambolis, A./Ferri, D./Bhattu, D./Bruns, E. A./Elsener, M./Kröcher, O./Prévôt, A. S. H./Baltensperger, U.**
Mitigation of secondary organic aerosol formation of log wood burning emissions by catalytic removal of aromatic hydrocarbons. *Environ. Sci. Technol.* 2018, 52 (22), 13381–13390. ▲
- Pieber, S. M./Kumar, N. K./Klein, F./Comte, P./Bhattu, D./Dommen, J./Bruns, E. A./Kılıç, D./El Haddad, I./Keller, A./et al.**
Gas-phase composition and secondary organic aerosol formation from standard and particle filter-retrofitted gasoline direct injection vehicles investigated in a batch and flow reactor. *Atmos. Chem. Phys.* 2018, 18 (13), 9929–9954. (joint paper) ▲
- Pison, I./Berchet, A./Saunois, M./Bousquet, P./Broquet, G./Conil, S./Delmotte, M./Ganesan, A./Laurent, O./Martin, D./et al.**
How a European network may help with estimating methane emissions on the French national scale. *Atmos. Chem. Phys.* 2018, 18 (5), 3779–3798. ▲
- Prinn, R. G./Weiss, R. F./Arduini, J./Arnold, T./DeWitt, H. L./Fraser, P. J./Ganesan, A. L./Gasore, J./Harth, C. M./Hermansen, O./et al.**
History of chemically and radiatively important atmospheric gases from the Advanced Global Atmospheric Gases Experiment (AGAGE). *ESSD* 2018, 10 (2), 985–1018. ▲
- Reimann, S./Elkins, J. W./Fraser, P. J./Hall, B. D./Kurylo, M. J./Mahieu, E./Montzka, S. A./Prinn, R. G./Rigby, M./Simmonds, P. G./et al.**
Observing the atmospheric evolution of ozone-depleting substances. *Comptes Rendus* 2018, 350 (7), 384–392. ▲
- Reimann, S./Vollmer, M. K./Brunner, D./Steinbacher, M./Hill, M./Henne, S./Emmenegger, L.**
Kontinuierliche Messung von Nicht-CO₂-Treibhausgasen auf dem Jungfraujoch (HALCLIM-2015–18). *Schlussbericht/Empa: Dübendorf*, 2018/84 p.
- Schoenenberger, F./Henne, S./Hill, M./Vollmer, M. K./Kouvarakis, G./Mihalopoulos, N./O'Doherty, S./Maione, M./Emmenegger, L./Peter, T./et al.**
Abundance and sources of atmospheric halocarbons in the Eastern Mediterranean. *Atmos. Chem. Phys.* 2018, 18 (6), 4069–4092. ▲
- Schrade, S./Zeyer, K./Emmenegger, L./Keck, M.**
Émissions de poussières fines (PM₁₀) dans les stabulations libres pour vaches laitières. *Rech. Agron. Suisse* 2018, 9 (9), 306–313.
- Schrade, S./Zeyer, K./Emmenegger, L./Keck, M.**
Feinstaub(PM₁₀)-Emissionen bei Milchvieh im Liegeboxenlaufstall mit Laufhof. *Agrarforsch. Schweiz* 2018, 9 (9), 306–313. ▲
- Schrade, S./Zeyer, K./Keck, M./Keller, M./Zähner, M./Mohn, J.**
Validation de la méthode des gaz traceurs pour mesurer les émissions en cas de ventilation naturelle. *Rech. Agron. Suisse* 2018, 9 (10), 340–347.
- Schrade, S./Zeyer, K./Keck, M./Keller, M./Zähner, M./Mohn, J.**
Validierung der Tracer-Ratio-Methode für Emissionsmessungen bei freier Lüftung. *Agrarforsch. Schweiz* 2018, 9 (10), 340–347. ▲
- Sherry, David/McCulloch, Archie/Liang, Qing/Reimann, Stefan/Newman, Paul A.**
Current sources of carbon tetrachloride (CCl₄) in our atmosphere. *Environmental Research Letters* 2018, 3, 024004 (7 pp.). ▲

Simmonds, P. G./Rigby, M./McCulloch, A./Vollmer, M. K./Henne, S./Mühle, J./O'Doherty, S./Manning, A. J./Krummel, P. B./Fraser, P. J./et al.

Recent increases in the atmospheric growth rate and emissions of HFC-23 (CHF₃) and the link to HCFC-22 (CHClF₂) production. *Atmos. Chem. Phys.* 2018, 18 (6), 4153–4169. ▲

Solberg, S./Claude, A./Reimann, S.

VOC measurements 2016. EMEP co-operative programme for monitoring and evaluation of the long-range transmission of air pollutants in Europe/EMEP/CCC/Report No.: 4/NILU (Norwegian Institute for Air Research): Kjeller, 2018/66 p.

Thomason, L. W./Ernest, N./Millán, L./Rieger, L./Bourassa, A./Vernier, J. P./Manney, G./Luo, B./Arfeuille, F./Peter, T.

A global space-based stratospheric aerosol climatology: 1979–2016. *ESSD* 2018, 10 (1), 469–492. ▲

Vlachou, A./Daellenbach, K. R./Bozzetti, C./Chazéau, B./Salazar, G. A./Szidat, S./Jaffrezo, J. L./Hueglin, C./Baltensperger, U./El Haddad, I./et al.

Advanced source apportionment of carbonaceous aerosols by coupling offline AMS and radiocarbon size-segregated measurements over a nearly 2-year period. *Atmos. Chem. Phys.* 2018, 18 (9), 6187–6206. ▲

Vollmer, M. K./Young, D./Trudinger, C. M./Mühle, J./Henne, S./Rigby, M./Park, S./Li, S./Guillevic, M./Mitreviski, B./et al.

Atmospheric histories and emissions of chlorofluorocarbons CFC-13 (CClF₃), ΣCFC-114 (C₂Cl₂F₄), and CFC-115 (C₂ClF₅). *Atmos. Chem. Phys.* 2018, 18 (2), 979–1002. ▲

Wagner, R./Jähn, M./Schepanski, K.

Wildfires as a source of airborne mineral dust – revisiting a conceptual model using large-eddy simulation (LES). *Atmos. Chem. Phys.* 2018, 18 (16), 11863–11884. ▲

Wang, Z./Wang, Y./Li, J./Henne, S./Zhang, B./Hu, J./Zhang, J.

Impacts of the degradation of 2,3,3,3-tetrafluoropropene into trifluoroacetic acid from its application in automobile air conditioners in China, the United States, and Europe. *Environ. Sci. Technol.* 2018, 52 (5), 2819–2826. ▲

Yu, Q./Duan, L./Yu, L./Chen, X./Si, G./Ke, P./Ye, Z./Mulder, J.

Threshold and multiple indicators for nitrogen saturation in subtropical forests. *Environ. Pollut.* 2018, 241, 664–673. ▲

Yuan, Y./Ries, L./Petermeier, H./Steinbacher, M./Gómez-Peláez, A. J./Leuenberger, M. C./Schumacher, M./Trickl, T./Couret, C./Meinhardt, F./et al.

Adaptive selection of diurnal minimum variation: a statistical strategy to obtain representative atmospheric CO₂ data and its application to European elevated mountain stations. *Atmos. Meas. Tech.* 2018, 11 (3), 1501–1514. ▲

Zhu, J./Yu, L./Bakken, L. R./Mørkved, P. T./Mulder, J./Dörsch, P.

Controlled induction of denitrification in *Pseudomonas aureofaciens*: a simplified denitrifier method for dual isotope analysis in NO₃⁻. *Sci. Total Environ.* 2018, 633, 1370–1378. ▲

Barro, C./Parravicini, M./Boulouchos, K./Liati, A.

Neat polyoxymethylene dimethyl ether in a diesel engine/part 2: exhaust emission analysis. *Fuel* 2018, 234, 1414–1421. ▲

Cabalzar, U./Stadelmann, P./Bach, C.

Betankung Gas-Förmiger Treibstoffe. *Aqua Gas* 2018, 98 (9), 54–58.

de Huu, M./Büker, O./Christensen, R./MacDonald, M./Maur, R./Schrade, M./Petter, H. T./Stadelmann, P.

The European research project on metrology for hydrogen vehicles – MetroHyVe. Presented at the 10th international symposium on fluid flow measurement (ISFFM), Querétaro, Mexico, March 21–23, 2018/pp 1–5.

Dimopoulos Eggenschwiler, P./Papetti, V./Lucci, F./Ortona, A.

Additive manufactured open cell structures: promising substrates for automotive catalysts. Presented at the 18. Internationales Stuttgarter Symposium Automobil- und Motorentechnik, Stuttgart, Germany, March 13–14, 2018/Bargende, M., Reuss, H. C., Wiedemann, J., Eds./FKFS – Forschungsinstitut für Kraftfahrwesen und Fahrzeugmotoren Stuttgart/pp 279–290.

Durand, T./Dimopoulos Eggenschwiler, P./Tang, Y./Liao, Y./Landmann, D.

Potential of energy recuperation in the exhaust gas of state of the art light duty vehicles with thermoelectric elements. *Fuel* 2018, 224, 271–279. (joint paper) ▲

Frischknecht, Rolf/Bauer, Christian/Froemelt, Andreas/Hellweg, Stefanie/Biemann, Kirsten/Buetler, Thomas/Cox, Brian/de Haan, Peter/Hoerl, Sebastian/Itten, René/Jungbluth, Niels/Ligen, Yorick/Mathys, Nicole A./Schiess, Samuel/Schori, Salome/van Loon, Patricia/Wang, Jing/Wettstein, Sarah (2018).

LCA of mobility solutions: approaches and findings – 66th LCA forum, Swiss Federal Institute of Technology, Zurich, 30 August, 2017. *International Journal of Life Cycle Assessment* 2018, 23 (2), 381–386 ▲

Fumey, B./Buetler, T./Vogt, U. F.

Ultra-low NO_x emissions from catalytic hydrogen combustion. *Appl. Energy* 2018, 213, 334–342. (joint paper) ▲

Gianetti, G./Sforza, L./Lucchini, T./D'Errico, G./Soltic, P./Rojewski, J./Hardy, G.

CFD modeling of combustion of a natural gas Light-Duty engine. In ATI 2018 – 73rd conference of the Italian Thermal Machines Engineering Association, presented at the 73rd conference of the Italian Thermal Machines Engineering Association (ATI 2018), Pisa, Italy, September 12–14, 2018/Desideri, U., Franco, A., di Marco, P., Fantozzi, F., Antonelli, M., Ferrari, L., Eds./Energy procedia/Elsevier, 2018/Vol. 148, pp 954–961.

Kammermann, T./Kreutner, W./Trottmann, M./Merotto, L./Soltic, P./Bleiner, D.

Spark-induced breakdown spectroscopy of methane/air and hydrogen-enriched methane/air mixtures at engine relevant conditions. *Spectrochim. Acta B* 2018, 148, 152–164. (joint paper) ▲

Küng, L./Bütler, T./Georges, G./Boulouchos, K.
Decarbonizing passenger cars using different powertrain technologies: optimal fleet composition under evolving electricity supply. *Transp. Res. Part C: Emerg. Technol.* 2018, 95, 785–801. ▲

Lal, Sreeyuth/Lucci, Francesco/Defraeye, Thijs/Poulikakos, Lily D./Partl, Manfred N./Derome, Dominique/Carmeliet, Jan
CFD modeling of convective scalar transport in a macroporous material for drying applications. *International Journal of Thermal Sciences* 2018, 123, 86–98. (joint paper) ▲

Liao, Yujun/Dimopoulos Eggenschwiler, Panayotis/Furrer, Roman/Wang, Moyu/Boulouchos, Konstantinos
Heat transfer characteristics of urea–water spray impingement on hot surfaces. *International Journal of Heat and Mass Transfer* 2018, 117, 447–457. (joint paper) ▲

Liat, A./Schreiber, D./Arroyo Rojas Dasilva, Y./Dimopoulos Eggenschwiler, P.
Ultrafine particle emissions from modern gasoline and diesel vehicles: an electron microscopic perspective. *Environ. Pollut.* 2018, 239, 661–669. (joint paper) ▲

Papetti, V./Dimopoulos Eggenschwiler, P./Della Torre, A./Lucci, F./Ortona, A./Montenegro, G.
Additive manufactured open cell polyhedral structures as substrates for automotive catalysts. *Int. J. Heat Mass Transf.* 2018, 126, 1035–1047. ▲

Poulikakos, L./Heutschi, K./Soltic, P./Cerny, I./Lees, A./van Loo, H./Mayer, R.
Defining road and rail vehicles with a low environmental footprint. Final report/2018/34 p. (joint paper)

Ardo, S./Fernandez Rivas, D./Modestino, M. A./Schulze Greiving, V./Abdi, F. F./Alarcon Llado, E./Artero, V./Ayers, K./Battaglia, C./Becker, J. P./et al.
Pathways to electrochemical solar-hydrogen technologies. *Energy Environ. Sci.* 2018, 11 (10), 2768–2783. ▲

Burankova, T./Roedern, E./Maniadaki, A. E./Hagemann, H./Rentsch, D./Łodziana, Z./Battaglia, C./Remhof, A./Embs, J. P.
Dynamics of the coordination complexes in a solid-state Mg electrolyte. *J. Phys. Chem. Lett.* 2018, 9 (22), 6450–6455. (joint paper) ▲

Chakraborty, S./Barbezat, M./Reyes, E. C./Chakraborty, A. K./Terrasi, G. P.
Investigation of the interfacial interactions in epoxy nano-composites filled with functionalized graphene based fillers. *Compos. Interfaces* 2018, 26 (2), 157–182. (joint paper) ▲

Delmelle, R./Terreni, J./Remhof, A./Heel, A./Proost, J./Borgschulte, A.
Evolution of water diffusion in a sorption-enhanced methanation catalyst. *Catalysts* 2018, 8 (9), 341 (15 pp.). (joint paper) ▲

Durand, T./Dimopoulos Eggenschwiler, P./Tang, Y./Liao, Y./Landmann, D.
Potential of energy recuperation in the exhaust gas of state of the art light duty vehicles with thermoelectric elements. *Fuel* 2018, 224, 271–279. (joint paper) ▲

Fumey, B./Buetler, T./Vogt, U. F.
Ultra-low NOx emissions from catalytic hydrogen combustion. *Appl. Energy* 2018, 213, 334–342. (joint paper) ▲

Garbayo, I./Struzik, M./Bowman, W. J./Pfenninger, R./Stilp, E./Rupp, J. L. M.
Glass-type polyamorphism in Li-garnet thin film solid state battery conductors. *Adv. Energy Mater.* 2018, 8 (12), 1702265 (14 pp.). ▲

Gaudy, Y. K./Dilger, S./Landmann, S./Aschauer, U./Pokrant, S./Haussener, S.
Determination and optimization of material parameters of particle-based LaTiO₂N photoelectrodes. *J. Mater. Chem. A* 2018, 6 (36), 17337–17352. ▲

Howald, L./Stilp, E./Baiutti, F./Dietl, C./Wrobel, F./Logvenov, G./Prokscha, T./Salman, Z./Wooding, N./Pavuna, D./et al.
Unexpected effects of thickness and strain on superconductivity and magnetism in optimally doped La_{1.84}Sr_{0.16}CuO₄ thin films. *Phys. Rev. B* 2018, 97 (9), 094514 (13 pp.). ▲

Ju, W./Heinz, M. V. F./Pusterla, L./Hofer, M./Fumey, B./Castiglioni, R./Pagani, M./Battaglia, C./Vogt, U. F.
Lab-scale alkaline water electrolyzer for bridging material fundamentals with realistic operation. *ACS Sustain. Chem. Eng.* 2018, 6 (4), 4829–4837. (joint paper) ▲

Perju, E./Cuervo-Reyes, E./Shova, S./Opris, D. M.
Synthesis of novel cyclosiloxane monomers containing push–pull moieties and their anionic ring opening polymerization. *RSC Adv.* 2018, 8 (14), 7569–7578. (joint paper) ▲

Rawlence, M./Filippin, A. N./Wäckerlin, A./Lin, T. Y./Cuervo-Reyes, E./Remhof, A./Battaglia, C./Rupp, J. L. M./Buecheler, S.
Effect of gallium substitution on lithium-ion conductivity and phase evolution in sputtered Li₇-3xGa xLa₃Zr₂₀12 thin films. *ACS Appl. Mater. Interfaces* 2018, 10 (16), 13720–13728. (joint paper) ▲

Rothensteiner, M./Bonk, A./Vogt, U. F./Emerich, H./van Bokhoven, J. A.
Structural changes in equimolar ceria–hafnia materials under solar thermochemical looping conditions: cation ordering, formation and stability of the pyrochlore structure. *RSC Adv.* 2017, 7 (85), 53797–53809. ▲

Sangeetha, N. S./Anand, V. K./Cuervo-Reyes, E./Smetana, V./Mudring, A. V./Johnston, D. C.
Enhanced moments of Eu in single crystals of the metallic helical antiferromagnet EuCo₂yAs₂. *Phys. Rev. B* 2018, 97 (14), 144403 (27 pp.). ▲

Suter, A./Logvenov, G./Boris, A. V./Baiutti, F./Wrobel, F./Howald, L./Stilp, E./Salman, Z./Prokscha, T./Keimer, B.
Superconductivity drives magnetism in δ-doped La₂CuO₄. *Phys. Rev. B* 2018, 97 (13), 134522 (11 pp.). ▲

Materials for Energy Conversion

Tang, Y./Li, X./Martin, L. H. J./Cuervo Reyes, E./Ivas, T./Leinenbach, C./Anand, S./Peters, M./Snyder, G. J./Battaglia, C.

Impact of Ni content on the thermoelectric properties of half-Heusler TiNiSn. *Energy Environ. Sci.* 2018, 11 (2), 311–320. (joint paper) ▲

Véron, A. C./Linden, A./Leclaire, N. A./Roedern, E./Hu, S./Ren, W./Rentsch, D./Nüesch, F. A.

One-dimensional organic-inorganic hybrid perovskite incorporating near-infrared-absorbing cyanine cations. *J. Phys. Chem. Lett.* 2018, 9 (9), 2438–2442. (joint paper) ▲

Xin, J./Tang, Y./Liu, Y./Zhao, X./Pan, H./Zhu, T.

Valleytronics in thermoelectric materials. *npj Quantum Mater.* 2018, 3, 9 (10 pp.).

Yan, Y./Wang, H./Zhu, M./Cai, W./Rentsch, D./Remhof, A.

Direct rehydrogenation of LiBH₄ from H-deficient Li₂B₁₂H₁₂-x. *Crystals* 2018, 8 (3), 131 (7 pp.). (joint paper) ▲

Yoon, S./Son, K./Ebbinghaus, S. G./Widenmeyer, M./Weidenkaff, A.

Ferromagnetism in nitrogen and fluorine substituted BaTiO₃. *J. Alloys Compd.* 2018, 749, 628–633. ▲

Zakharchuk, K. V./Widenmeyer, M./Alikin, D. O./Xie, W./Populoh, S./Mikhalev, S. M./Tselev, A./Frade, J. R./Weidenkaff, A./Kovalevsky, A. V.

A self-forming nanocomposite concept for ZnO-based thermoelectrics. *J. Mater. Chem. A* 2018, 6 (27), 13386–13396. ▲

Zeng, J./Bejtka, K./Ju, W./Castellino, M./Chiodoni, A./Sacco, A./Farkhondehfar, M. A./Hernández, S./Rentsch, D./Battaglia, C./et al.

Advanced Cu-Sn foam for selectively converting CO₂ to CO in aqueous solution. *Appl. Catal. B* 2018, 236, 475–482. ▲

Materials for Renewable Energy

Brog, J.-P., Crochet, A., Seydoux, J., Clift, M.J.D., Baichette, B., Maharajan, S., Barosova, H., Brodard, P., Spodaryk, M., Züttel, A., Rothen-Rutishauser, B., Kwon, N.H., & Fromm, K.M.

Characteristics and properties of nano-LiCoO₂ synthesized by pre-organized single source precursors: Li-ion diffusivity, electrochemistry and biological assessment. *Journal of Nanobiotechnology* 2017, 15:58. ▲

Gallandat, N., Bérard, J., Abbet, F., & Züttel, A.

Small-scale demonstration of the conversion of renewable energy to synthetic hydrocarbons. *Sustainable Energy and Fuels* 2017, 1(8), 1748–1758. ▲

Gallandat, N., Romanowicz, K., & Züttel, A.

An analytical model for the electrolyser performance derived from materials parameters. *Journal of Power and Energy Engineering* 2017, 5(10), 34–49. ▲

Gallandat, N./Bérard, J./Abbet, F./Züttel, A.

Small-scale demonstration of the conversion of renewable energy to synthetic hydrocarbons. *Sustainable Energy & Fuels* 2017, 1 (8), 1748–1758. ▲

Gallandat, N./Mutschler, R./Vernay, V./Yang, H./Züttel, A.

Experimental performance investigation of a 2 kW methanation reactor. *Sustainable Energy & Fuels* 2018, 2 (5), 1101–1110. ▲

Gallandat, N./Romanowicz, K./Züttel, A.

An analytical model for the electrolyser performance derived from materials parameters. *J. Pow. Energy Eng.* 2017, 5 (10), 34–49. ▲

Ko, Y.D., Yang, H.N., Züttel, A., Kim, S.D., Kim, W.J.

Membrane electrode assembly fabricated with the combination of Pt/C and hollow shell structured-Pt-SiO₂@ZrO₂ sphere for self-humidifying proton exchange membrane fuel cell. *Journal of Power Sources* 2017, 367, 8–16. ▲

Lombardo, L./Yang, H./Züttel, A.

Destabilizing sodium borohydride with an ionic liquid. *Mater. Today Energy* 2018, 9, 391–396.

Mutschler, R./Moioli, E./Luo, W./Gallandat, N./Züttel, A.

CO₂ hydrogenation reaction over pristine Fe, Co, Ni, Cu and Al₂O₃ supported Ru: Comparison and determination of the activation energies. *J. Catal.* 2018, 366, 139–149. ▲

Yang, H., Züttel, A., Kim, S., Ko, Y., Kim, W.

Effect of Boron Doping On Graphene Oxide for Ammonia Adsorption. *ChemNanoMat* 2017, 3 (11), 794–797. ▲

Yang, H./Lombardo, L./Luo, W./Kim, W./Züttel, A.

Hydrogen storage properties of various carbon supported NaBH₄ prepared via metathesis. *Int. J. Hydrog. Energy* 2018, 43 (14), 7108–7116. ▲

Zhao, K./Wang, L./Calizzi, M./Moioli, E./Züttel, A.

In situ control of the adsorption species in CO₂ hydrogenation: determination of intermediates and byproducts. *J. Phys. Chem. C* 2018, 122 (36), 20888–20893. ▲

Technology and Society

Adam, V./Caballero-Guzman, A./Nowack, B.

Considering the forms of released engineered nanomaterials in probabilistic material flow analysis. *Environ. Pollut.* 2018, 243, 17–27. ▲

Beloin-Saint-Pierre, Didier/Turner, David A./Salieri, Beatrice/Haarman, Arthur/Hischier, Roland

How suitable is LCA for nanotechnology assessment? Overview of current methodological pitfalls and potential solutions: 65th LCA Discussion Forum, Swiss Federal Institute of Technology, Zürich, May 24, 2017. *International Journal of Life Cycle Assessment* 2018 23 (1), 191–196. ▲

Bieser, J. C. T./Hilty, L. M.

An approach to assess indirect environmental effects of digitalization based on a time–use perspective. In *Advances and new trends in environmental informatics. Managing disruption, big data and open science*, presented at the *EnviroInfo 2018*, Garching near Munich, September 5 – 7, 2018/Bungartz, H. J., Kranzlmüller, D., Weinberg, V., Weismüller, J., Wohlgemuth, V., Eds./Progress in IS/Springer: Cham, 2018/pp 67–78.

Bieser, J. C. T./Hilty, L. M.

Assessing indirect environmental effects of information and communication technology (ICT): a systematic literature review. *Sustainability* 2018, 10 (8), 2662 (19 pp.). ▲

Bieser, J. C. T./Hilty, L. M.

Indirect effects of the digital transformation on environmental sustainability: methodological challenges in assessing the greenhouse gas abatement potential of ICT. In *ICT4S2018. 5th International conference on information and communication technology for sustainability*, presented at the *ICT4S 2018. 5th international conference on information and communication technology for sustainability*, Toronto, Canada, May 14–18, 2018/Penzenstadler, B., Easterbrook, S., Venters, C., Ahmed, S. I., Eds./EPIc series in computing/EasyChair, 2018/Vol. 52, pp 68–81.

Bornemann, B./Ejderyan, O./Stauffacher, M./Wäger, P.

Gesellschaftliche Transformation – welche Rolle(n) für den Staat? *GAIA* 2018, 27 (1), 182–184. ▲

Caballero–Guzman, A./Nowack, B.

Prospective nanomaterial mass flows to the environment by life cycle stage from five applications containing CuO, DPP, FeOx, CNT and SiO₂. *J. Clean. Prod.* 2018, 203, 990–1002. ▲

Dlouhá, Jana/Henderson, Laura/Kapitulčinová, Dana/Mader, Clemens

Sustainability-oriented higher education networks: characteristics and achievements in the context of the UN DESD. *Journal of Cleaner Production* 2018, 172, 4263–4276. ▲

Fadeel, B./Bussy, C./Merino, S./Vázquez, E./Flahaut, E./Mouchet, F./Evariste, L./Gauthier, L./Koivisto, A. J./Vogel, U./et al.

Safety assessment of graphene-based materials: focus on human health and the environment. *ACS Nano* 2018, 12 (11), 10582–10620. (joint paper) ▲

Gasser, M./Hüdepohl, H./Haarman, A.

Feasibility study for the certification of sustainably recycled plastics in India/Sustainable Recycling Industries (SRI): St. Gallen, 2018/40 p.

Gauch, M./Matasci, C./Hincapié, I./Böni, H.

Material- und Energieressourcen sowie Umweltauswirkungen der Mobilität Schweiz/Empa – Materials Science & Technology: St. Gallen, 2017/94 p.

Giese, B./Klaessig, F./Park, B./Kaegi, R./Steinfeldt, M./Wigger, H./von Gleich, A./Gottschalk, F.

Risks, release and concentrations of engineered nanomaterial in the environment. *Sci. Rep.* 2018, 8 (1), 1565 (18 pp.). ▲

Guldner, A./Garling, M./Morgen, M./Naumann, S./Kern, E./Hilty, L. M.

Energy consumption and hardware utilization of standard software: methods and measurements for software sustainability. In *From science to society: new trends in environmental informatics*/Otjacques, B., Hitzelberger, P., Naumann, S., Wohlgemuth, V., Eds./Progress in IS/Springer: Cham, 2018/pp 251–261.

Hauser, C./Blumer, H./Christen, M./Hilty, L./Huppenbauer, M./Kaiser, T.

Ethische Herausforderungen für Unternehmen im Umgang mit Big Data/Schweizerische Akademie der Technischen Wissenschaften SATW: Zürich, 2017/32 p.

Hilty, Lorenz M./Huber, Patrizia

Motivating students on ICT-related study programs to engage with the subject of sustainable development. *International Journal of Sustainability in Higher Education* 2018, 19 (3), 642–656 ▲

Hischier, R.

Car vs. packaging – a first, simple (environmental) sustainability assessment of our changing shopping behaviour. *Sustainability* 2018, 10 (9), 3061 (12 pp.). ▲

Hischier, R./Kwon, N. H./Brog, J. P./Fromm, K. M.

Early-stage sustainability evaluation of nanoscale cathode materials for lithium ion batteries. *ChemSusChem* 2018, 11 (13), 2068–2076. ▲

Holm, S.

An agent-based model of wood markets in Switzerland. Doctoral dissertation, University of Zurich, Zürich, 2018, 128 p.

Holm, S./Hilty, L. M./Lemm, R./Thees, O.

Empirical validation of an agent-based model of wood markets in Switzerland. *PLoS One* 2018, 13 (1), e0190605 (24 pp.). ▲

Holm, S./Thees, O./Lemm, R./Olschewski, R./Hilty, L. M.

An agent-based model of wood markets: scenario analysis. *For. Policy Econ.* 2018, 95, 26–36. ▲

Huber Kolpondinos, M. Z./Glinz, M.

Behind points and levels – the influence of gamification algorithms on requirements prioritization. In *2017 IEEE 25th international requirements engineering conference (RE)*, presented at the *2017 IEEE 25th international requirements engineering conference (RE)*, Lisbon, Portugal, September 4–8, 2017/IEEE: Los Alamitos, CA, USA, 2017/pp 332–341.

Kawecki, D./Scheeder, P. R. W./Nowack, B.

Probabilistic material flow analysis of seven commodity plastics in Europe. *Environ. Sci. Technol.* 2018, 52 (17), 9874–9888. ▲

- Kern, E./Hilty, L. M./Guldner, A./Maksimov, Y. V./Filler, A./Gröger, J./Naumann, S.**
Sustainable software products – towards assessment criteria for resource and energy efficiency. 2018, 86, 199–210. ▲
- Kral, U./Laner, D./Rechberger, H./Heiberg, S./Heuss–Aßbichler, S./Horváth, Z./Szabó, K./Morf, L. S./Mueller, S. R./Wäger, P./et al.**
Unece develops specifications for classifying materla recovery projects in the circular economy. In The 25th world mining congress 2018. Sustainable development, presented at the 25th world mining congress, Astana, Kazakhstan, June 19–22, 2018/2018/p (17 pp.).
- Løvik, A. N./Hagelüken, C./Wäger, P.**
Improving supply security of critical metals: current developments and research in the EU. *Sustain. Mater. Technologies* 2018, 15, 9–18.
- Nowack, B.**
Mikroplastik aus Textilien. *Aqua Viva*, 2018, pp 22–25.
- Nowack, Bernd/Mitrano, Denise M.**
Procedures for the production and use of synthetically aged and product released nanomaterials for further environmental and ecotoxicity testing. *NanoImpact* 2018, 10, 70–80.
- Ortego, A./Valero, A./Valero, A./Restrepo, E.**
Vehicles and critical raw materials: a sustainability assessment using thermodynamic rarity: Vehicles and Critical Raw Materials. *J. Ind. Ecol.* 2018, 22 (5), 1005–1015. ▲
- Piccinno, F./Hischier, R./Seeger, S./Som, C.**
Eco-efficient process improvement at the early development stage: identifying environmental and economic process hotspots for synergetic improvement potential. *Environ. Sci. Technol.* 2018, 52 (10), 5959–5967. ▲
- Piccinno, Fabiano/Hischier, Roland/Seeger, Stefan/Som, Claudia**
Predicting the environmental impact of a future nanocellulose production at industrial scale: application of the life cycle assessment scale-up framework. *Journal of Cleaner Production* 2018, 174, 283–295. ▲
- Pouri, M. J./Hilty, L. M.**
ICT-enabled sharing economy and environmental sustainability – a resource-oriented approach. In *Advances and new trends in environmental informatics. Managing disruption, big data and open science*, presented at the *EnviroInfo 2018*, Garching near Munich, September 5 – 7, 2018/Bungartz, H. J., Kranzlmüller, D., Weinberg, V., Weismüller, J., Wohlgemuth, V., Eds./Progress in IS/Springer: Cham, 2018/pp 53–65.
- Roberts, K. P./Turner, D. A./Coello, J./Stringfellow, A. M./Bello, I. A./Powrie, W./Watson, G. V. R.**
SWIMS: a dynamic life cycle-based optimisation and decision support tool for solid waste management. *J. Clean. Prod.* 2018, 196, 547–563. ▲
- Salieri, B./Turner, D. A./Nowack, B./Hischier, R.**
Life cycle assessment of manufactured nanomaterials: Where are we? *NanoImpact* 2018, 10, 108–120.
- Scholz, R. W./Bartelsman, E. J./Diefenbach, S./Franke, L./Grunwald, A./Helbing, D./Hill, R./Hilty, L./Höjer, M./Klauser, S./et al.**
Unintended side effects of the digital transition: European scientists' messages from a proposition-based expert round table. *Sustainability* 2018, 10 (6), 2001 (48 pp.). ▲
- Singer–Brodowski, Mandy/Mader, Clemens**
Die Energiewende braucht die Bildungswende: der Beitrag der Bildung für nachhaltige Entwicklung zur Energiewende auf individueller, organisationaler und gesamtgesellschaftlicher Ebene. In *Holstenkamp, Lars/Radtke, Jörg (Eds.), Handbuch Energiewende und Partizipation 2018* (pp. 463–473).
- Steinhäuser, Klaus Günter/Sayre, Philip G./Nowack, Bernd**
Reliability of methods and data for regulatory assessment of nanomaterial risks. *NanoImpact* 2018, 10, 68–69.
- Thiébaud (–Müller), Esther/Hilty, Lorenz M./Schluep, Mathias/Widmer, Rolf/Faulstich, Martin**
Service lifetime, storage time, and disposal pathways of electronic equipment: a Swiss case study. *Journal of Industrial Ecology* 2018, 22 (1), 196–208 ▲
- Thiébaud, E./Hilty, L. M./Schluep, M./Faulstich, M.**
Where do all the metals go? Indium and neodymium flows from emerging technologies in Switzerland. Presented at the 7. Wissenschaftskongress Abfall- und Ressourcenwirtschaft, Aachen, March 16–17, 2017/Innsbruck University Press/pp 129–133.
- Thiébaud, E./Hilty, L./Schluep, M./Böni, H./Faulstich, M.**
Where do our resources go? Indium, neodymium, and gold flows connected to the use of electronic equipment in Switzerland. *Sustainability* 2018, 10 (8), 2658 (17 pp.). ▲
- Wang, Y./Nowack, B.**
Dynamic probabilistic material flow analysis of nano-SiO₂, nano iron oxides, nano-CeO₂ nano-Al₂O₃, and quantum dots in seven European regions. *Environ. Pollut.* 2018, 235, 589–601. ▲
- Wang, Y./Nowack, B.**
Environmental risk assessment of engineered nano-SiO₂, nano iron oxides, nano-CeO₂, nano-Al₂O₃, and quantum dots. *Environ. Toxicol. Chem.* 2018, 37 (5), 1387–1395. ▲
- Werner, J./Persson, I./Björneholm, O./Kawecki, D./Saak, C. M./Walz, M. M./Ekholm, V./Unger, I./Vaitl, C./Caleman, C./et al.**
Shifted equilibria of organic acids and bases in the aqueous surface region. *Phys. Chem. Chem. Phys.* 2018, 20 (36), 23281–23293. ▲
- Wigger, H./Wohlleben, W./Nowack, B.**
Redefining environmental nanomaterial flows: consequences of the regulatory nanomaterial definition on the results of environmental exposure models. *Environ. Sci. Nano* 2018, 5 (6), 1372–1385. ▲

Functional Materials

Amberg, Martin/Vandenbossche, Marianne/Hegemann, Dirk.

Controlled Ag release from electrically conductive coating systems. *Surface and Coatings Technology* 2018, 336, 29–33 ▲

Bernard, L./Rupper, P./Faccio, G./Hegemann, D./Scholder, O./Heuberger, M./Maniura–Weber, K./Vandenbossche, M.

Plasma polymer film designs through the eyes of ToF-SIMS. *Biointerph.: J. Biomater. Biolog. Interfac.* 2018, 13 (3), 03B417 (11 pp.). (joint paper) ▲

Buhmann, M. T./Abt, D./Altenried, S./Rupper, P./Betschart, P./Zumstein, V./Maniura–Weber, K./Ren, Q.

Extraction of biofilms from ureteral stents for quantification and cultivation–dependent and –independent analyses. *Front. Microbiol.* 2018, 9, 1470 (9 pp.). (joint paper) ▲

Butnaru, I./Varganici, C. D./Pinteala, M./Lehner, S./Bruma, M./Gaan, S.

Thermal decomposition of polyimides containing phosphine–oxide units. *J. Anal. Appl. Pyrolysis* 2018, 134, 254–264. ▲

Drabik, M./Lohmann, D./Hanus, J./Shelemin, A./Rupper, P./Biederman, H./Hegemann, D.

Structure and stability of C:H:O plasma polymer films co–polymerized using dimethyl carbonate. *Plasma* 2018, 1 (1), 156–176.

Gooneie, A./Hufenus, R.

Hybrid carbon nanoparticles in polymer matrix for efficient connected networks: self–assembly and continuous pathways. *Macromolecules* 2018, 51 (10), 3547–3562. ▲

Hegemann, D./Indutnyi, I./Zajčková, L./Makhneva, E./Zdeněk, F./Ushenin, Y./Vandenbossche, M.

Stable, nanometer–thick oxygen–containing plasma polymer films suited for enhanced biosensing. *Plasma Process. Polym.* 2018, 15 (11), e1800090 (9 pp.). ▲

Leal, A. A./Neururer, O. A./Bian, A./Gooneie, A./Rupper, P./Masania, K./Dransfeld, C./Hufenus, R.

Interfacial interactions in bicomponent polymer fibers. *Polymer* 2018, 142, 375–386. ▲

Maggioni, G. M./Fernández–Ronco, M. P./van der Meijden, M. W./Kellogg, R. M./Mazzotti, M.

Solid state deracemisation of two imine–derivatives of phenylglycine derivatives via high–pressure homogenisation and temperature cycles. *Crystengcomm* 2018, 20 (27), 3828–3838. ▲

Makhneva, E./Obusnik, A./Farka, Z./Skládal, P./Vandenbossche, M./Hegemann, D./Zajčková, L.

Carboxyl–rich plasma polymer surfaces in surface plasmon resonance immunosensing. *Japanese J. Appl. Phys.* 2018, 57 (1S), 01AG06 (5 pp.). ▲

Naeimirad, M./Zadhoush, A./Neisiany, R. E./Ramakrishna, S./Salimian, S./Leal, A. A.

Influence of microfluidic flow rates on the propagation of nano/microcracks in liquid core and hollow fibers. *Theor. Appl. Fract. Mech.* 2018, 96, 83–89. (joint paper) ▲

Nyström, Gustav/Roder, Lukas/Fernández–Ronco, María P./Mezzenga, Raffaele

(2018). Amyloid templated organic–inorganic hybrid aerogels. *Advanced Functional Materials*. ▲

Perret, E./Monney, C./Johnston, S./Khmaldzde, J./Lyzwa, F./Gaina, R./Dantz, M./Pellicciari, J./Piamonteze, C./Mallett, B. P. P./et al.

Coupled Cu and Mn charge and orbital orders in YBa₂Cu₃O₇/Nd_{0.65}(Ca_{1–y}Sr_y)_{0.35}MnO₃ multilayers. *Commun. Phys.* 2018, 1, 45 (10 pp.).

Przystas, A./Jovic, M./Salmeia, K. A./Rentsch, D./Ferry, L./Mispreuve, H./Perler, H./Gaan, S.

Some key factors influencing the flame retardancy of EDA–DOPO containing flexible polyurethane foams. *Polymers* 2018, 10 (10), 1115 (15 pp.). (joint paper) ▲

Quandt, B. M./Boesel, L. F./Rossi, R. M.

Polymer optical fibres in healthcare: solutions, applications and implications. A perspective. *Polym. Int.* 2018, 67 (9), 1150–1154. (joint paper) ▲

Salmeia, K. A./Baumgartner, G./Jovic, M./Gössi, A./Riedl, W./Zich, T./Gaan, S.

Industrial upscaling of DOPO–based phosphonamidates and phosphonates derivatives using Cl₂ gas as a chlorinating agent. *Org. Process Res. Dev.* 2018, 22 (11), 1570–1577. ▲

Salmeia, K. A./Flaig, F./Rentsch, D./Gaan, S.

One–pot synthesis of P(O)–N containing compounds using N–chlorosuccinimide and their influence in thermal decomposition of PU foams. *Polymers* 2018, 10 (7), 740 (16 pp.). (joint paper) ▲

Salmeia, K. A./Gooneie, A./Simonetti, P./Nazir, R./Kaiser, J. P./Rippl, A./Hirsch, C./Lehner, S./Rupper, P./Hufenus, R./et al.

Comprehensive study on flame retardant polyesters from phosphorus additives. *Polym. Degrad. Stab.* 2018, 155, 22–34. ▲

Subjalearndee, N./Hegemann, D./Amberg, M./Hanselmann, B./Rupper, P./Intasanta, V.

Structural development of nanosilver on metal oxide nanofibrous membrane by plasma enhanced chemical vapor deposition (PECVD). *Appl. Surf. Sci.* 2018, 452, 306–313. ▲

Vandenbossche, M./Dorst, J./Amberg, M./Schütz, U./Rupper, P./Heuberger, M./Hegemann, D.

Functionality and chemical stability of plasma polymer films exhibiting a vertical cross–linking gradient in their subsurface. *Polym. Degrad. Stab.* 2018, 156, 259–268. ▲

- Vandenbossche, M./Gunkel–Grabole, G./Car, A./Bernard, L./Rupper, P./Maniura–Weber, K./Heuberger, M./Faccio, G./Hegemann, D.**
Near-surface structure of plasma polymer films affects surface behavior in water and its interaction with proteins. *Plasma Chem. Plasma Process.* 2018, 38 (4), 851–870. (joint paper) ▲
- Vandenbossche, M./Hegemann, D.**
Recent approaches to reduce aging phenomena in oxygen- and nitrogen-containing plasma polymer films: an overview. *Curr. Opin. Sol. State Mat. Sci.* 2018, 22, 26–38. ▲
- Vandenbossche, M./Petit, L./Mathon–Lagresle, J./Spano, F./Rupper, P./Bernard, L./Hegemann, D.**
Formation of lateral chemical gradients in plasma polymer films shielded by an inclined mask. *Plasma Process. Polym.* 2018, 15 (4), e1700185 (10 pp.). (joint paper) ▲
- Wiesenmueller, S./Cierniak, P./Juebner, M./Koerner, E./Hegemann, D./Mercer–Chalmers Bender, K.**
Tailored antimicrobial activity and long-term cytocompatibility of plasma polymer silver nanocomposites. *J. Biomater. Appl.* 2018, 33 (3), 327–339. ▲
- Yan, Y./Gooneie, A./Ye, H./Deng, L./Qiu, Z./Reifler, F. A./Hufenus, R.**
Morphology and crystallization of biobased polyamide 56 blended with polyethylene terephthalate. *Macromol. Mater. Eng.* 2018, 303 (9), 1800214 (10 pp.). (joint paper) ▲
- Bösiger, Peter/Tegl, Gregor/Richard, Isabelle M.T./Le Gat, Luce/Huber, Lukas/Stagl, Viktoria/Mensah, Anna/Guebitz, Georg M./Rossi, René M./Fortunato, Giuseppino**
Enzyme functionalized electrospun chitosan mats for antimicrobial treatment. *Carbohydrate Polymers* 2018, 181, 551–559. (joint paper) ▲
- Choi, H./Carboni, M./Kim, Y. K./Jung, C. H./Moon, S. Y./Koebel, M. M./Park, J. Y.**
Synthesis of high surface area TiO₂ aerogel support with Pt nanoparticle catalyst and CO oxidation study. *Catal. Lett.* 2018, 148 (5), 1504–1513. ▲
- Galmarini, S./Hanusch, U./Giraud, M./Cayla, N./Chiappe, D./Von Moos, N./Hofmann, H./Maurizi, L.**
Beyond unpredictability: the importance of reproducibility in understanding the protein corona of nanoparticles. *Bioconj. Chem.* 2018, 29 (10), 3385–3393. ▲
- Iswar, S./Snellings, G. M. B. F./Zhao, S./Erni, R./Bahk, Y. K./Wang, J./Lattuada, M./Koebel, M. M./Malfait, W. J.**
Reinforced and superinsulating silica aerogel through in situ cross-linking with silane terminated prepolymers. *Acta Mater.* 2018, 147, 322–328. (joint paper) ▲
- Kunhi Mohamed, A./Parker, S. C./Bowen, P./Galmarini, S.**
An atomistic building block description of C–S–H – towards a realistic C–S–H model. *Cem. Concr. Res.* 2018, 107, 221–235. ▲
- La Torraca, P./Bobinger, M./Pavan, P./Becherer, M./Zhao, S./Koebel, M./Cattani, L./Lugli, P./Larcher, L.**
High efficiency thermoacoustic loudspeaker made with a silica aerogel substrate. *Adv. Mater. Technol.* 2018, 3 (8), 1800139 (6 pp.). ▲
- Mertgen, A. S./Yazgan, G./Guex, A. G./Fortunato, G./Müller, E./Huber, L./Schneider, R./Brunelli, M./Rossi, R. M./Maniura–Weber, K./et al.**
Controlling the surface structure of electrospun fibers: effect on endothelial cells and blood coagulation. *Biointerph.: J. Biomater. Biol. Interfac.* 2018, 13 (5), 051001 (10 pp.). (joint paper) ▲
- Muehleemann, S. E./Huber, L./Zhao, S./Matam, S. K./Koebel, M. M.**
Facile synthesis of resorcinol–melamine–formaldehyde based carbon xerogel. In *Materials today: proceedings, presented at the 1st international conference on advanced energy materials and 8th international conference on advanced nanomaterials, Guildford, United Kingdom, September 12–14, 2016/Elsevier, 2018/Vol. 5*, pp 13776–13784.
- Naeimirad, M./Zadhoush, A./Neisiany, R. E./Ramakrishna, S./Salimian, S./Leal, A.**
A. Influence of microfluidic flow rates on the propagation of nano/microcracks in liquid core and hollow fibers. *Theor. Appl. Fract. Mech.* 2018, 96, 83–89. (joint paper) ▲
- Orsolini, P./Antonini, C./Stojanovic, A./Malfait, W. J./Caseri, W. R./Zimmermann, T.**
Superhydrophobicity of nanofibrillated cellulose materials through polysiloxane nanofilaments. *Cellulose* 2018, 25 (2), 1127–1146. (joint paper) ▲
- Pons, E./Yrieix, B./Brunner, S.**
Evaluation of VIPs after mild artificial aging during 10 years: focus on the core behavior. *Energy Build.* 2018, 162, 198–207. ▲
- Salimian, S./Malfait, W. J./Zadhoush, A./Talebi, Z./Naeimirad, M.**
Fabrication and evaluation of silica aerogel–epoxy nanocomposites: fracture and toughening mechanisms. *Theor. Appl. Fract. Mech.* 2018, 97, 156–164. ▲
- Salimian, S./Zadhoush, A./Mohammadi, A.**
A review on new mesostructured composite materials: part I. synthesis of polymer–mesoporous silica nanocomposite. *J. Reinf. Plast. Compos.* 2018, 37 (7), 441–459. ▲
- Salimian, S./Zadhoush, A./Mohammadi, A.**
A review on new mesostructured composite materials: part II. characterization and properties of polymer–mesoporous silica nanocomposite. *J. Reinf. Plast. Compos.* 2018, 37 (11), 738–769. ▲
- Salimian, S./Zadhoush, A./Talebi, Z./Fischer, B./Winiger, P./Winnefeld, F./Zhao, S./Barbezat, M./Koebel, M. M./Malfait, W. J.**
Silica aerogel–epoxy nanocomposites: understanding epoxy reinforcement in terms of aerogel surface chemistry and epoxy–silica interface compatibility. *ACS Appl. Nano Mater.* 2018, 1 (8), 4179–4189. (joint paper)

- Salimian, S./Zadhoush, A./Naeimirad, M./Kotek, R./Ramakrishna, S.**
A review on aerogel: 3D nanoporous structured fillers in polymer-based nanocomposites. *Polymer Composites* 2018, 39 (10), 3383–3408 ▲
- Xu, H./Jia, J./Zhao, S./Chen, P./Xia, Q./Wu, J./Zhu, P.**
Hydrophobic TiO₂-SiO₂ aerogel composites for fast removal of organic pollutants. *Chem. Sel.* 2018, 3 (37), 10483–10490. ▲
- Zhao, S./Emery, O./Wohlhauser, A./Kobel, M. M./Adlhart, C./Malfait, W. J.**
Merging flexibility with superinsulation: machinable, nanofibrous pullulan-silica aerogel composites. *Mater. Des.* 2018, 160, 294–302. ▲
- Zhao, S./Malfait, W. J./Guerrero-Alburquerque, N./Kobel, M. M./Nyström, G.**
Biopolymer aerogels and foams: chemistry, properties, and applications. *Angew. Chem. Int. Ed.* 2018, 57 (26), 7580–7608. (joint paper) ▲
- Zhao, S./Malfait, W. J./Guerrero-Alburquerque, N./Kobel, M. M./Nyström, G.**
Biopolymer-Aerogel und -Schäume: Chemie, Eigenschaften und Anwendungen. *Angew. Chem.* 2018, 130 (26), 7704–7733. (joint paper)
- Bachtiar, E. V./Rüggeberg, M./Hering, S./Kaliske, M./Niemz, P.**
Estimating shear properties of walnut wood: a combined experimental and theoretical approach. *Mater. Struct.* 2017, 50, 248 (15 pp.). ▲
- Bachtiar, E. V./Rüggeberg, M./Niemz, P.**
Mechanical behavior of walnut (*Juglans regia* L.) and cherry (*Prunus avium* L.) wood in tension and compression in all anatomical directions. Revisiting the tensile/compressive stiffness ratios of wood. *Holzforschung* 2018, 72 (1), 71–80. ▲
- Berglund, L. A./Burgert, I.**
Bioinspired wood nanotechnology for functional materials. *Adv. Mater.* 2018, 30 (19), 1704285 (15 pp.). ▲
- Bösiger, P./Fortunato, G./Schwarze, F. W. M. R.**
Antibacterial activity of aqueous fungal extracts derived from basidiomycetes. *Mod. Appl. Bioequiv. Bioavailab.* 2017, 2 (5), 555598 (3 pp.). (joint paper) ▲
- Bösiger, P./Richard, I. M. T./LeGat, L./Michen, B./Schubert, M./Rossi, R. M./Fortunato, G.**
Application of response surface methodology to tailor the surface chemistry of electrospun chitosan-poly(ethylene oxide) fibers. *Carbohydr. Polym.* 2018, 186, 122–131. (joint paper) ▲
- Casdorff, K./Keplinger, T./Rüggeberg, M./Burgert, I.**
A close-up view of the wood cell wall ultrastructure and its mechanics at different cutting angles by atomic force microscopy. *Planta* 2018, 247 (5), 1123–1132. ▲
- Casdorff, Kirstin/Kläusler, Oliver/Gabriel, Joseph/Amen, Carlos/Lehringer, Christian/Burgert, Ingo/Keplinger, Tobias**
About the influence of a water-based priming system on the interactions between wood and one-component polyurethane adhesive studied by atomic force microscopy and confocal Raman spectroscopy imaging. *International Journal of Adhesion and Adhesives* 2018, 80, 52–59. ▲
- De Meester, B./de Vries, L./Özparpucu, M./Gierlinger, N./Corneillie, S./Pallidis, A./Goeminne, G./Morreel, K./De Bruyne, M./De Rycke, R./et al.**
Vessel-specific reintroduction of CINNAMOYL-COA REDUCTASE1 (CCR1) in Dwarfed ccr1 mutants restores vessel and xylary fiber integrity and increases biomass. *Plant Physiol.* 2018, 176 (1), 611–633. ▲
- Desseaux, S./dos Santos, S./Geiger, T./Tingaut, P./Zimmermann, T./Partl, M. N./Poulikakos, L. D.**
Improved mechanical properties of bitumen modified with acetylated cellulose fibers. *Composites B* 2018, 140, 139–144. (joint paper) ▲
- Ermeydan, M. A.**
Modification of spruce wood by UV-crosslinked PEG hydrogels inside wood cell walls. *React. Funct. Polym.* 2018, 131, 100–106. ▲
- Felten, J./Vahala, J./Love, J./Gorzás, A./Rüggeberg, M./Delhomme, N./Leśniewska, J./Kangasjärvi, J./Hvidsten, T. R./Mellerowicz, E. J./et al.**
Ethylene signaling induces gelatinous layers with typical features of tension wood in hybrid aspen. *New Phytol.* 2018, 218 (3), 999–1014. ▲
- Follain, N./Belbekhouche, S./Bras, J./Siqueira, G./Chappey, C./Marais, S./Dufresne, A.**
Tunable gas barrier properties of filled-PCL film by forming percolating cellulose network. *Colloids Surf. A* 2018, 545, 26–30. ▲
- Forsthuber, B./Grüll, G./Arnold, M./Podgorski, L./Bulian, F.**
Service life prediction of exterior wood coatings. In *Processing technologies for the forest and biobased products industries, presented at the Proceedings of the 5th international conference on processing technologies for the forest and bio-based products industries (PTF BPI 2018)*, Freising, Munich, September 20–21, 2018/Barbu, M. C., Petutschnigg, A., Tudor, E. M., Eds./TUM/FH Salzburg, 2018/pp 86–92.
- Frey, M./Widner, D./Segmehl, J. S./Casdorff, K./Keplinger, T./Burgert, I.**
Delignified and densified cellulose bulk materials with excellent tensile properties for sustainable engineering. *ACS Appl. Mater. Interfaces* 2018, 10 (5), 5030–5037. ▲
- Grönquist, P./Wittel, F. K./Rüggeberg, M.**
Modeling and design of thin bending wooden bilayers. *PLoS One* 2018, 13 (10), e0205607 (12 pp.). ▲
- Guo, H./Bachtiar, E. V./Ribera, J./Heeb, M./Schwarze, F. W. M. R./Burgert, I.**
Non-biocidal preservation of wood against brown-rot fungi with a TiO₂/Ce xerogel. *Green Chem.* 2018, 20 (6), 1375–1382. ▲

Guo, H./Büchel, M./Li, X./Wäckerlin, A./Chen, Q./Burgert, I.

Dictating anisotropic electric conductivity of a transparent copper nanowire coating by the surface structure of wood. *J. R. Soc. Interface* 2018, 15 (142), 20170864 (9 pp.). (joint paper) ▲

Hausmann, M. K./Rühs, P. A./Siqueira, G./Läuger, J./Libanori, R./Zimmermann, T./Studart, A. R.

Dynamics of cellulose nanocrystal alignment during 3D printing. *ACS Nano* 2018, 12 (7), 6926–6937. ▲

Jankowska, D./Heck, T./Schubert, M./Yerlikaya, A./Weymuth, C./Rentsch, D./Schober, I./Richter, M.

Enzymatic synthesis of lignin-based concrete dispersing agents. *ChemBioChem* 2018, 19 (13), 1365–1369. (joint paper) ▲

Keplinger, T./Frey, M./Burgert, I.

Versatile strategies for the development of wood-based functional materials. In *Bioinspiration, Biomimetics, and Bioreplication VIII*, presented at the Bioinspiration, Biomimetics, and Bioreplication VIII, Denver, March 5–7, 2018/Lakhtakia, A., Ed./Proceedings of SPIE/SPIE: Bellingham, 2018/Vol. 10593, p 1059313 (6 pp.).

Kostić, S./Meier, S./Cabane, E./Burgert, I.

Enhancing the performance of beech-timber concrete hybrids by a wood surface pre-treatment using sol-gel chemistry. *Heliyon* 2018, 4 (9), e00762 (18 pp.).

Kostic, S./Merk, V./Berg, J. K./Hass, P./Burgert, I./Cabane, E.

Timber-mortar composites: the effect of sol-gel surface modification on the wood-adhesive interface. *Compos. Struct.* 2018, 201, 828–833. ▲

Künniger, T./Huch, A./Arnold, M.

Cellulose nanofibrils in wood coatings – improved hail impact resistance? Presented at the PRA's 11th international woodcoatings congress. Sustainable aesthetics and protection, Amsterdam, The Netherlands, October 23–24, 2018/Hannover/p (12 pp.).

Kymäläinen, Maija/Ben Mlouka, Selim/Belt, Tiina/Merk, Vivian/Liljeström, Ville/Hänninen, Tuomas/Uimonen, Tuuli/Kostiainen, Mauri/Rautkari, Lauri

Chemical, water vapour sorption and ultrastructural analysis of Scots pine wood thermally modified in high-pressure reactor under saturated steam. *Journal of Materials Science* 2018, 53 (4), 3027–3037. ▲

Lämmlein, S. L./Mannes, D./Schwarze, F. W. M./Burgert, I./Sedighi Gilani, M.

Combined experimental and numerical investigation of vibro-mechanical properties of varnished wood for stringed instruments. In *Model validation and uncertainty quantification*, volume 3, presented at the 35th IMAC conference and exposition on structural dynamics 2017, Garden Grove, California, January 30 – February 2, 2017/Barthorpe, R., Platz, R., Lopez, I., Moaveni, B., Papadimitriou, C., Eds./Conference proceedings of the society for experimental mechanics series/Springer: Cham, Switzerland, 2017/pp 81–83.

Lehmann, E. H./Lämmlein, S./Mannes, D.

Neutron imaging as tool for investigations on historical musical instruments. *J. Archaeological Sci. Rep.* 2018, 20, 239–243.

Lucchini, M. A./Lizundia, E./Moser, S./Niederberger, M./Nyström, G.

Titania-cellulose hybrid monolith for in-flow purification of water under solar illumination. *ACS Appl. Mater. Interfaces* 2018, 10 (35), 29599–29607. ▲

Mahrt, F./Marcolli, C./David, R. O./Grönquist, P./Barthazy Meier, E. J./Lohmann, U./Kanji, Z. A.

Ice nucleation abilities of soot particles determined with the Horizontal Ice Nucleation Chamber. *Atmos. Chem. Phys.* 2018, 18 (18), 13363–13392. ▲

Morris, H./Gillingham, M. A. F./Plavcová, L./Gleason, S. M./Olson, M. E./Coomes, D. A./Fichtler, E./Klepsch, M. M./Martínez-Cabrera, H. I./McGlenn, D. J./et al.

Vessel diameter is related to amount and spatial arrangement of axial parenchyma in woody angiosperms. *Plant Cell Environ.* 2018, 41 (1), 245–260. ▲

Morris, H./Plavcová, L./Gorai, M./Klepsch, M. M./Kotowska, M./Schenk, H. J./Jansen, S.

Vessel-associated cells in angiosperm xylem: highly specialized living cells at the symplast-apoplast boundary. *Am. J. Bot.* 2018, 105 (2), 151–160. ▲

Muff, L. F./Luxbacher, T./Burgert, I./Michen, B.

Investigating the time-dependent zeta potential of wood surfaces. *J. Colloid Interface Sci.* 2018, 518, 165–173. ▲

Nyström, G./Mezzenga, R.

Liquid crystalline filamentous biological colloids: analogies and differences. *Curr. Opin. Colloid Interface Sci.* 2018, 38, 30–44. ▲

Orsolini, P./Antonini, C./Stojanovic, A./Malfait, W. J./Caseri, W. R./Zimmermann, T.

Superhydrophobicity of nanofibrillated cellulose materials through polysiloxane nanofilaments. *Cellulose* 2018, 25 (2), 1127–1146. (joint paper) ▲

Özparpucu, M./Gierlinger, N./Burgert, I./Van Acker, R./Vanholme, R./Boerjan, W./Pilate, G./Déjardin, A./Rüggeberg, M.

The effect of altered lignin composition on mechanical properties of CINNAMYL ALCOHOL DEHYDROGENASE (CAD) deficient poplars. *Planta* 2018, 247 (4), 887–897. ▲

Pantano, D./Neubauer, N./Navratilova, J./Scifo, L./Civardi, C./Stone, V./von der Kammer, F./Müller, P./Sanles Sobrido, M./Angeletti, B./et al.

Transformations of nanoenabled copper formulations govern release, antifungal effectiveness, and sustainability throughout the wood protection lifecycle. *Environ. Sci. Technol.* 2018, 52 (3), 1128–1138. ▲

Panzarasa, G./Osypova, A./Consolati, G./Quasso, F./Soliveri, G./Ribera, J./Schwarze, F. W. M. R.

Preparation of a sepia melanin and poly(ethylene-alt-maleic anhydride) hybrid material as an adsorbent for water purification. *Nanomaterials* 2018, 8 (2), 54 (9 pp.). ▲

- Panzarasa, G./Osypova, A./Ribera, J./Schwarze, F. W. M. R./Quasso, F./Consolati, G.**
Hybrid adsorbent materials obtained by the combination of poly(ethylene-alt-maleic anhydride) with lignin and lignosulfonate. *J. Polym. Environ.* 2018, 26 (11), 4293–4302. ▲
- Prats-Mateu, B./Felhofer, M./de Juan, A./Gierlinger, N.**
Multivariate unmixing approaches on Raman images of plant cell walls: new insights or overinterpretation of results? *Plant Methods* 2018, 14 (1), 52. ▲
- Ribera, J./Tang, A. M. C./Schubert, M./Lam, R. Y. C./Chu, L. M./Leung, M. W. K./Kwan, H. S./Bas, M. C./Schwarze, F. W. M. R.**
In-vitro evaluation of antagonistic *Trichoderma* strains for eradicating *Phellinus noxius* in colonised wood. *J. Trop. For. Sci.* 2016, 28 (4), 457–468. ▲
- Segmehl, J. S./Laromaine, A./Keplinger, T./May-Masnou, A./Burgert, I./Roig, A.**
Magnetic wood by in situ synthesis of iron oxide nanoparticles via a microwave-assisted route. *J. Mater. Chem. C* 2018, 6 (13), 3395–3402. ▲
- Segmehl, J. S./Lauria, A./Keplinger, T./Berg, J. K./Burgert, I.**
Tracking of short distance transport pathways in biological tissues by ultra-small nanoparticles. *Front. Chem.* 2018, 6, 28 (9 pp.). ▲
- Segmehl, J. S./Studer, V./Keplinger, T./Burgert, I.**
Characterization of wood derived hierarchical cellulose scaffolds for multifunctional applications. *Materials* 2018, 11 (4), 517 (11 pp.). ▲
- Sehaqui, H./Spera, P./Huch, A./Zimmermann, T.**
Nanoparticles capture on cellulose nanofiber depth filters. *Carbohydr. Polym.* 2018, 201, 482–489. ▲
- Tiefenauer, R. F./Dalgaty, T./Keplinger, T./Tian, T./Shih, C. J./Vörös, J./Aramesh, M.**
Monolayer graphene coupled to a flexible plasmonic nanograting for ultrasensitive strain monitoring. *Small* 2018, 14 (28), 1801187 (7 pp.). ▲
- Trottmann, M./Wichser, A./Arnold, M./Bleiner, D.**
Space resolved detection of Iodine (I) & Potassium (K) in treated wooden samples. Presented at the SCS Fall Meeting 2018, Lausanne, September 7, 2018. (joint paper)
- Vailati, C./Hass, P./Burgert, I./Rüggeberg, M.**
Upscaling of wood bilayers: design principles for controlling shape change and increasing moisture change rate. *Mater. Struct.* 2017, 50, 250 (12 pp.). ▲
- Vailati, C./Rüggeberg, M./Burgert, I./Hass, P.**
The kinetics of wooden bilayers is not affected by different wood adhesive systems. *Wood Sci. Technol.* 2018, 52 (6), 1589–1606. ▲
- Vailati, C./Bachtiar, E./Hass, P./Burgert, I./Rüggeberg, M.**
An autonomous shading system based on coupled wood bilayer elements. *Energy and Buildings* 2018, 158, 1013–1022. ▲
- Vitas, S./Keplinger, T./Reichholf, N./Figli, R./Cabane, E.**
Functional lignocellulosic material for the remediation of copper(II) ions from water: towards the design of a wood filter. *J. Hazard. Mater.* 2018, 355, 119–127. (joint paper) ▲
- Voisin, H. P./Gordeyeva, K./Siqueira, G./Hausmann, M. K./Studart, A. R./Bergström, L.**
3D printing of strong lightweight cellular structures using polysaccharide-based composite foams. *ACS Sustain. Chem. Eng.* 2018, 6 (12), 17160–17167. ▲
- Wang, Y./Tian, T./Cabane, E.**
Wood composites with wettability patterns prepared by controlled and selective chemical modification of a three-dimensional wood scaffold. *ACS Sustain. Chem. Eng.* 2017, 5 (12), 11686–11694. ▲
- Weishaupt, R./Heuberger, L./Siqueira, G./Gutt, B./Zimmermann, T./Maniura-Weber, K./Salentinig, S./Faccio, G.**
Enhanced antimicrobial activity and structural transitions of a nanofibrillated cellulose-nisin biocomposite suspension. *ACS Appl. Mater. Interfaces* 2018, 10 (23), 20170–20181. (joint paper) ▲
- Wood, D./Vailati, C./Menges, A./Rüggeberg, M. H.**
ygroscopically actuated wood elements for weather responsive and self-forming building parts – facilitating up-scaling and complex shape changes. *Constr. Build. Mater.* 2018, 165, 782–791. ▲
- Zhao, S./Malfait, W. J./Guerrero-Alburquerque, N./Koebel, M. M./Nyström, G.**
Biopolymer aerogels and foams: chemistry, properties, and applications. *Angew. Chem. Int. Ed.* 2018, 57 (26), 7580–7608. (joint paper) ▲
- Zhao, S./Malfait, W. J./Guerrero-Alburquerque, N./Koebel, M. M./Nyström, G.**
Biopolymer-Aerogele und -Schäume: Chemie, Eigenschaften und Anwendungen. *Angew. Chem.* 2018, 130 (26), 7704–7733. (joint paper)
- Akker, I. V./Kaufmann, J./Desbois, G./Klaver, J./Urai, J. L./Berger, A./Herwegh, M.**
Multiscale porosity changes along the pro- and retrograde deformation path: an example from Alpine slates. *Solid Earth* 2018, 9 (5), 1141–1156. ▲
- Bernard, E.**
Magnesium silicate hydrate (M-S-H) characterization: temperature, calcium, aluminum and alkali. Doctoral dissertation, Université de Bourgogne Franche-Comté, Besançon, 2017, 248 p.
- Bernard, E./Lothenbach, B./Dauzères, A./Pochard, I.**
Surface properties of magnesium silicate hydrate (M-S-H). Presented at the NUWCEM 2018. Cement-based materials for nuclear wastes, Avignon, France, October 24–26, 2018/p (4 pp.).

Bernard, Ellina/Dauzères, Alexandre/Lothenbach, Barbara

Magnesium and calcium silicate hydrates, part II: Mg-exchange at the interface "low-pH" cement and magnesium environment studied in a C-S-H and M-S-H model system. *Applied Geochemistry* 2018, 89, 210-218. ▲

Bernard, Ellina/Lothenbach, Barbara/Cau-Dit-Coumes, Céline/Chlique, Christophe/Dauzères, Alexandre/Pochard, Isabelle

Magnesium and calcium silicate hydrates, part I: investigation of the possible magnesium incorporation in calcium silicate hydrate (C-S-H) and of the calcium in magnesium silicate hydrate (M-S-H). *Applied Geochemistry* 2018, 89, 229-242. ▲

Dauti, D./Dal Pont, S./Weber, B./Briffaut, M./Toropovs, N./Wyrzykowski, M./Sciumé, G.

Modeling concrete exposed to high temperature: impact of dehydration and retention curves on moisture migration. *Int. J. Numer. Anal. Methods Geomechanics* 2018, 42 (13), 1516-1530. (joint paper) ▲

Dauti, D./Tengattini, A./Dal Pont, S./Toropovs, N./Briffaut, M./Weber, B.

Analysis of moisture migration in concrete at high temperature through in-situ neutron tomography. *Cem. Concr. Res.* 2018, 111, 41-55. (joint paper) ▲

Di Bella, C.

Drying shrinkage of cementitious materials at early age. Doctoral dissertation, ETH Zürich, Zürich, 2016, 186 p.

Fernández, Á./Lothenbach, B./Cruz Alonso, M./García Calvo, J. L.

Thermodynamic modelling of short and long term hydration of ternary binders. Influence of Portland cement composition and blast furnace slag content. *Constr. Build. Mater.* 2018, 166, 510-521. ▲

Ghourchian, S.

Plastic shrinkage cracking in concrete: from mechanisms to mitigation strategies. Doctoral dissertation, ETH Zurich, Zürich, 2018, 185 p.

Ghourchian, S./Wyrzykowski, M./Baquerizo, L./Lura, P.

Performance of passive methods in plastic shrinkage cracking mitigation. *Cem. Concr. Compos.* 2018, 91, 148-155. ▲

Ghourchian, S./Wyrzykowski, M./Lura, P.

A poromechanics model for plastic shrinkage of fresh cementitious materials. *Cem. Concr. Res.* 2018, 109, 120-132. ▲

Ghourchian, S./Wyrzykowski, M./Lura, P.

Plastic shrinkage and cracking of concrete – experiments and modelling with poromechanics. Presented at the Symposium on concrete modelling (CONMOD 2018), Delft, Netherlands, August 27-30, 2018/Schlangen, E., de Schutter, G., Šavija, B., Zhang, H., Romero Rodriguez, C., Eds./Proceedings Pro/Rilem Publications: Paris/Vol. 127, pp 179-183.

Ghourchian, Sadegh/Wyrzykowski, Mateusz/Baquerizo, Luis/Lura, Pietro

Susceptibility of Portland cement and blended cement concretes to plastic shrinkage cracking. *Cement and Concrete Composites* 2018, 85, 44-55. ▲

Harmanci, Yunus Emre/Michels, Julien/Czaderski, Christoph/Loser, Roman/Chatzi, Eleni

Long-term residual anchorage resistance of gradient anchorages for prestressed CFRP strips. *Composites Part B: Engineering* 2018, 139, 171-184. (joint paper) ▲

He, F./Wang, R./Shi, C./Zhang, R./Shi, Z./Zhang, D.

Effect of bound chloride on extraction of water soluble chloride in cement-based materials exposed to a chloride salt solution. *Constr. Build. Mater.* 2018, 160, 223-232. ▲

Hu, Z.

Prediction of autogenous shrinkage in fly ash blended cement systems. Doctoral dissertation, EPFL, Lausanne, 2017, 198 p.

Hu, Z./Hilaire, A./Wyrzykowski, M./Scrivener, K./Lura, P.

Finite element simulation of autogenous deformation of cement pastes. Presented at the Symposium on concrete modelling (CONMOD 2018), Delft, Netherlands, August 27-30, 2018/Schlangen, E., de Schutter, G., Šavija, B., Zhang, H., Romero Rodriguez, C., Eds./Proceedings Pro/Rilem Publications: Paris/Vol. 127, pp 146-149.

Hu, Z./Wyrzykowski, M./Scrivener, K./Lura, P.

A novel method to predict internal relative humidity in cementitious materials by ¹H NMR. *Cem. Concr. Res.* 2018, 104, 80-93. ▲

Igarashi, S. I./Wyrzykowski, M./Lura, P./Mechtcherine, V.

Recommendation of RILEM TC 260-RSC: using superabsorbent polymers (SAP) to mitigate autogenous shrinkage. *Mater. Struct.* 2018, 51 (5), 135 (7 pp.). ▲

Kaufmann, J./Loser, R./Winnefeld, F./Leemann, A.

Sulfate resistance and phase composition of modern shotcrete. In Paper proceedings, presented at the ITA - Aites World Tunnel Congress, Dubai, April 21-26, 2018/mci, 2018/pp 2-10.

Kunther, W./Lothenbach, B.

Improved volume stability of mortar bars exposed to magnesium sulfate in the presence of bicarbonate ions. *Cem. Concr. Res.* 2018, 109, 217-229. ▲

Landrou, G./Brumaud, C./Plötze, M. L./Winnefeld, F./Habert, G.

A fresh look at dense clay paste: deflocculation and thixotropy mechanisms. *Colloids Surf. A* 2018, 539, 252-260. ▲

Le Saoût, G./Lothenbach, B./Taquet, P./Fryda, H./Winnefeld, F.

Hydration of calcium aluminate cement blended with anhydrite. *Adv. Cem. Res.* 2018, 30 (1), 24-36. ▲

- Leemann, A./Pahlke, H./Loser, R./Winnefeld, F.**
Carbonation resistance of mortar produced with alternative cements. *Mater. Struct.* 2018, 51 (5), 114 (12 pp.). ▲
- Li, X./Snellings, R./Antoni, M./Alderete, N. M./Ben Haha, M./Bishnoi, S./Cizer, Ö./Cyr, M./De Weerd, K./Dhandapani, Y./et al.**
Reactivity tests for supplementary cementitious materials: RILEM TC 267–TRM phase 1. *Mater. Struct.* 2018, 51 (6), 151. ▲
- Lothenbach, B./Bernard, E./L'Hôpital, E.**
Calcium silicate hydrates and magnesium silicate hydrates. Presented at the 20. internationale Baustofftagung (ibaasil), Weimar, Germany, September 12–14, 2018/Bauhaus-Universität Weimar: Weimar/p (10 pp.).
- Lothenbach, B./Bernard, E./Mäder, U.**
Zeolite formation from albite, ettringite and C–S–H. Presented at the NUWCEM 2018. Cement-based materials for nuclear wastes, Avignon, France, October 24–26, 2018/p (4 pp.).
- Lothenbach, B./Winnefeld, F.**
Thermodynamic modelling: a tool to understand the chemistry of hydrated cements. Presented at the Symposium on concrete modelling (CONMOD 2018), Delft, Netherlands, August 27–30, 2018/Schlangen, E., de Schutter, G., Šavija, B., Zhang, H., Romero Rodriguez, C., Eds./Proceedings Pro/Rilem Publications: Paris/Vol. 127, pp 10–13.
- Lothenbach, B./Winnefeld, F.**
Thermodynamic modelling of cement hydration: Portland cements – blended cements – calcium sulfoaluminate cements. In *Cementitious materials. Composition, properties, application*/Pöllmann, H., Ed./De Gruyter: Berlin, 2017/pp 103–143.
- Ma, B./Lothenbach, B.**
Zeolites – secondary minerals in degraded Portland cement/clay system: synthesis and thermodynamic study. Presented at the NUWCEM 2018. Cement-based materials for nuclear wastes, Avignon, France, October 24–26, 2018/p (3 pp.).
- Mancini, A./Wieland, E./Lothenbach, B./Dähn, R./Wehrli, B.**
Interaction of Fe(II, III) with cement phases in anoxic conditions. Presented at the NUWCEM 2018. Cement-based materials for nuclear wastes, Avignon, France, October 24–26, 2018/p (4 pp.).
- Mechtcherine, V./Snoeck, D./Schröfl, C./De Belie, N./Klemm, A. J./Ichimiya, K./Moon, J./Wyrzykowski, M./Lura, P./Toropovs, N./et al.**
Testing superabsorbent polymer (SAP) sorption properties prior to implementation in concrete: results of a RILEM Round–Robin Test. *Mater. Struct.* 2018, 51, 28 (16 pp.). ▲
- Nedyalkova, L./Lothenbach, B./Tits, J./Wieland, E./Renaudin, G./Mäder, U.**
Effect of redox conditions on sulfur and selenium binding in AFm phases. Presented at the NUWCEM 2018. Cement-based materials for nuclear wastes, Avignon, France, October 24–26, 2018/p (3 pp.).
- Olsson, N./Lothenbach, B./Baroghel–Bouny, V./Nilsson, L. O.**
Unsaturated ion diffusion in cementitious materials – the effect of slag and silica fume. *Cem. Concr. Res.* 2018, 108, 31–37. ▲
- Pedersen, M./Lothenbach, B./Winnefeld, F./Skibsted, J.**
(2018). Hydrate phase assemblages in calcium sulfoaluminate – metakaolin – limestone blends. In Martirena, Fernando/Favier, Aurélie/Scrivener, Karen (Eds.), *Calcined clays for sustainable concrete: proceedings of the 2nd international conference on calcined clays for sustainable concrete* (pp. 352–357).
- Plusquellec, G./Belda Revert, A./Geiker, M. R./Lothenbach, B./De Weerd, K.**
Changes in pore solution composition in mortar due to carbonation. Presented at the Symposium on concrete modelling (CONMOD 2018), Delft, Netherlands, August 27–30, 2018/Schlangen, E., de Schutter, G., Šavija, B., Zhang, H., Romero Rodriguez, C., Eds./Proceedings Pro/Rilem Publications: Paris/Vol. 127, pp 490–493.
- Provis, J. L./Winnefeld, F.**
Outcomes of the round robin tests of RILEM TC 247–DTA on the durability of alkali-activated concrete. In *International Conference on Concrete Repair, Rehabilitation and Retrofitting (ICCRRR 2018)*, presented at the International conference on concrete repair, rehabilitation and retrofitting (ICCRRR 2018), Cape Town, South Africa, November 19–21, 2018/Alexander, M. G., Beushausen, H., Dehn, F., Moyo, P., Eds./MATEC web of conferences/EDP Sciences: Les Ulis Cedex A, France, 2018/Vol. 199, p 02024 (7 pp.).
- Rojo, H./Scheinost, A. C./Lothenbach, B./Laube, A./Wieland, E./Tits, J.**
Retention of selenium by calcium aluminate hydrate (AFm) phases under strongly-reducing radioactive waste repository conditions. *Dalton Trans.* 2018, 47 (12), 4209–4218. ▲
- Salimian, S./Zadhoush, A./Talebi, Z./Fischer, B./Winiger, P./Winnefeld, F./Zhao, S./Barbezat, M./Koebel, M. M./Malfait, W. J.**
Silica aerogel–epoxy nanocomposites: understanding epoxy reinforcement in terms of aerogel surface chemistry and epoxy–silica interface compatibility. *ACS Appl. Nano Mater.* 2018, 1 (8), 4179–4189. (joint paper)
- Shi, Z./Geng, G./Leemann, A./Lothenbach, B.**
Properties of alkali–silica reaction products. Presented at the NUWCEM 2018. Cement-based materials for nuclear wastes, Avignon, France, October 24–26, 2018/p (4 pp.).
- Shi, Z./Shi, C./Wan, S./Li, N./Zhang, Z.**
Effect of alkali dosage and silicate modulus on carbonation of alkali-activated slag mortars. *Cem. Concr. Res.* 2018, 113, 55–64. ▲
- Shi, Z./Shi, C./Wan, S./Zhang, Z.**
Effects of alkali dosage and silicate modulus on alkali–silica reaction in alkali-activated slag mortars. *Cem. Concr. Res.* 2018, 111, 104–115. ▲

Shi, Z./Shi, C./Zhang, J./Wan, S./Zhang, Z./Ou, Z.

Alkali-silica reaction in waterglass-activated slag mortars incorporating fly ash and metakaolin. *Cem. Concr. Res.* 2018, 108, 10–19. ▲

Snellings, R./Chwast, J./Cizer, Ö./De Belie, N./Dhandapani, Y./Durdzinski, P./Elsen, J./Haufe, J./Hooton, D./Patapy, C./et al.

Report of TC 238-SCM: hydration stoppage methods for phase assemblage studies of blended cements – results of a round robin test. *Mater. Struct.* 2018, 51 (4), 111 (12 pp.). ▲

Steiner, S./Lothenbach, B./Borgschulte, A./Proske, T./Winnefeld, F.

Effect of relative humidity on the carbonation rate of portlandite, calcium silicate hydrates and ettringite. Presented at the 20. internationale Baustofftagung (ibausil), Weimar, Germany, September 12–14, 2018/p (6 pp.). **(joint paper)**

Vespa, M./Lothenbach, B./Dähn, R./Huthwelker, T./Wieland, E.

Characterisation of magnesium silicate hydrate phases (M–S–H): a combined approach using synchrotron-based absorption-spectroscopy and ab initio calculations. *Cem. Concr. Res.* 2018, 109, 175–183. ▲

Wang, D./Shi, C./Farzadnia, N./Shi, Z./Jia, H.

A review on effects of limestone powder on the properties of concrete. *Constr. Build. Mater.* 2018, 192, 153–166. ▲

Weber, B.

Alternative implementation of a porous media model for simulating drying of heated concrete. Presented at the COMSOL conference 2018, Lausanne, Switzerland, October 22–24, 2018/p (7 pp.).

Wieland, E./Kosakowski, G./Lothenbach, B./Kulik, D. A.

Geochemical modelling of the long-term evolution of chemical conditions in cement-stabilized waste sorts (L/ILW). Presented at the NUWCEM 2018. Cement-based materials for nuclear wastes, Avignon, France, October 24–26, 2018/p (4 pp.).

Wieland, E./Kosakowski, G./Lothenbach, B./Kulik, D. A./Cloet, V.

Preliminary assessment of the temporal evolution of waste packages in the near field of the L/ILW repository. *Arbeitsbericht NAB 18-05/Nagra Arbeitsberichte (NABs)/Nagra: Wettingen*, 2018/125 p.

Winnefeld, F./Hargis, C. W./Steiner, S./Kaufmann, J./Borgschulte, A./Marchi, M./Allevi, S./Lothenbach, B.

Carbonation resistance of calcium sulfoaluminate cement mortars. Presented at the Conference to celebrate the centennial of LMC and Karen Scrivener's 60th birthday, Lausanne, Switzerland, August 19–22, 2018/EPFL: Lausanne/p (4 pp.). **(joint paper)**

Winnefeld, F./Hargis, C. W./Steiner, S./Kaufmann, J./Borgschulte, A./Marchi, M./Allevi, S./Lothenbach, B.

Carbonatisierungswiderstand von Mörteln auf Basis Calciumsulfoaluminatzement. Presented at the 20. Internationale Baustofftagung (ibausil), Weimar, Germany, September 12–14, 2018/Bauhaus-Universität Weimar: Weimar/p (8 pp.). **(joint paper)**

Wyrzykowski, M./McDonald, P. J./Scrivener, K. L./Lura, P.

Water redistribution within the microstructure of cementitious materials due to temperature changes studied with ¹H NMR. *J. Phys. Chem. C* 2017, 121 (50), 27950–27962. ▲

Wyrzykowski, M./Sanahuja, J./Charpin, L./Königsberger, M./Hellmich, C./Pichler, B./Valentini, L./Honório, T./Smilauer, V./Hajkova, K./et al.

Numerical benchmark campaign of COST Action TU1404 – microstructural modelling. *RILEM Tech. Lett.* 2017, 2, 107.

Wyrzykowski, M./Terrasi, G./Lura, P.

Expansive high-performance concrete for chemical-prestress applications. *Cem. Concr. Res.* 2018, 107, 275–283. **(joint paper)** ▲

Xu, B./Lothenbach, B./Leemann, A./Winnefeld, F.

Reaction mechanism of magnesium potassium phosphate cement with high magnesium-to-phosphate ratio. *Cem. Concr. Res.* 2018, 108, 140–151. ▲

Xu, B./Lothenbach, B./Ma, H.

Properties of fly ash blended magnesium potassium phosphate mortars: effect of the ratio between fly ash and magnesia. *Cem. Concr. Compos.* 2018, 90, 169–177. ▲

Xu, B./Winnefeld, F./Lothenbach, B.

Hydration of magnesium potassium phosphate cements: experimental findings and thermodynamic modelling. Presented at the NUWCEM 2018. Cement-based materials for nuclear wastes, Avignon, France, October 24–26, 2018/pp 1–4.

Yang, F./Prade, F./Griffa, M./Kaufmann, R./Herzen, J./Pfeiffer, F./Lura, P.

X-ray dark-field contrast imaging of water transport during hydration and drying of early-age cement-based materials. *Mater. Charact.* 2018, 142, 560–576. **(joint paper)** ▲

Zhang, P./Wittmann, F. H./Lura, P./Müller, H. S./Han, S./Zhao, T.

Application of neutron imaging to investigate fundamental aspects of durability of cement-based materials: a review. *Cem. Concr. Res.* 2018, 108, 152–166. ▲

Zhou, T./Yang, F./Kaufmann, R./Wang, H.

Applications of laboratory-based phase-contrast imaging using speckle tracking technique towards high energy X-rays. *J. Imaging* 2018, 4 (5), 69 (7 pp.). **(joint paper)**

- Anilkumar, K. M./Jinisha, B./Manoj, M./Pradeep, V. S./Jayalekshmi, S.**
Layered sulfur/PEDOT:PSS nano composite electrodes for lithium sulfur cell applications. *Appl. Surf. Sci.* 2018, 442, 556–564. ▲
- Ashraf, C. M./Anilkumar, K. M./Jinisha, B./Manoj, M./Pradeep, V. S./Jayalekshmi, S.**
Acid washed, steam activated, coconut shell derived carbon for high power supercapacitor applications. *J. Electrochem. Soc.* 2018, 165 (5), A900–A909. ▲
- Blugan, G./Mata–Osoro, G./Fecht, S./Janczak–Rusch, J./Kuebler, J.**
Torsional shear strength of steel joined with high performance aerospace adhesives at cryogenic and elevated temperatures. *PLoS One* 2018, 13 (11), e0206981 (14 pp.). ▲
- Borlaf, M./Frankowska, M./Kubiak, W. W./Graule, T.**
Ce³⁺ and Eu³⁺ emissions in YAG via a core–shell strategy for warm white LED lighting. *J. Sol–Gel Sci. Technol.* 2018, 86 (1), 1–6. ▲
- Borlaf, M./Frankowska, M./Kubiak, W. W./Graule, T.**
Strong photoluminescence emission at low dopant amount in YAG:Ce and YAG:Eu phosphors. *Mater. Res. Bull.* 2018, 100, 413–419. ▲
- Boudoire, F./Partel, S./Toth, R./Heier, J.**
Combining parallel pattern generation of electrohydrodynamic lithography with serial addressing. *RSC Adv.* 2018, 8 (54), 30932–30936. (joint paper) ▲
- Braun, A.**
In situ photoelectron spectroscopy. In *Encyclopedia of interfacial chemistry: surface science and electrochemistry*/Wandelt, K., Ed./Elsevier, 2018/pp 264–279.
- Braun, A.**
“Thou shalt not make unto thee any graven image”: some remarks on x–ray scattering and materials science. *Microsc. Microanal.* 2018, 24 (S2), 526–529. ▲
- Braun, Artur/Maabong, Kalebogile/Diale, Mmantsae M./Toth, R.**
Hydrogen production with holes: what we learn from operando studies. *SPIE Newsroom* 2017, 4p ▲
- Camps, I./Borlaf, M./Toudert, J./de Andrés, A./Colomer, M. T./Moreno, R./Serna, R.**
Evidencing early pyrochlore formation in rare–earth doped TiO₂ nanocrystals: Structure sensing via VIS and NIR Er³⁺ light emission. *J. Alloys Compd.* 2018, 735, 2267–2274. ▲
- Čejková, J./Tóth, R./Braun, A./Branicki, M./Ueyama, D./Lagzi, I.**
Shortest path finding in mazes by active and passive particles. In *Shortest path solvers. From software to wetware*/Adamatzky, A., Ed./Emergence, complexity and computation, Vol. 32/Springer: Cham, 2018/pp 401–408.
- Chen, X./Sharp, I. D./Cao, R./Zheng, Y./Zhao, C./Braun, A.**
Introduction. *J. Mater. Res.* 2018, 33 (5), 517–518. ▲
- Clark Ligon, S./Blugan, G./Dalcanele, F./Kuebler, J.**
Production of improved SiC and SiCN ceramics from polycarbosilane and polysilazane composites. Presented at the 9th international conference on times of polymers and composites: from aerospace to nanotechnology, Ischia, Naples, June 17–21, 2018/AIP conference proceedings/American Institute of Physics Inc./Vol. 1981, p 020037 (4 pp.).
- Dalcanele, F.**
Polymer derived ceramics process in biomedical applications: pacemaker electrode. Doctoral dissertation, ETH Zürich, Zürich, 2017, 134 p.
- Falk, G. S./Borlaf, M./López–Muñoz, M. J./Fariñas, J. C./Rodrigues Neto, J. B./Moreno, R.**
Microwave–assisted synthesis of TiO₂ nanoparticles: photocatalytic activity of powders and thin films. *J. Nanopart. Res.* 2018, 20 (2), 23. ▲
- Falk, G. S./Borlaf, M./López–Muñoz, M. J./Rodrigues Neto, J. B./Moreno, R.**
Photocatalytic activity of nanocrystalline TiNb₂O₇ obtained by a colloidal sol–gel route. *Ceram. Int.* 2018, 44 (6), 7122–7127. ▲
- Flak, D./Chen, Q./Simon Mun, B./Liu, Z./Rekas, M./Braun, A.**
In situ ambient pressure XPS observation of surface chemistry and electronic structure of α -Fe₂O₃ and γ -Fe₂O₃ nanoparticles. *Appl. Surf. Sci.* 2018, 455, 1019–1028. ▲
- García, A. P./Guaglianoni, W. C./García, D. R./Soares, L. G./de Oliveira Vaz, M./Teixeira, S. R./Pereira, M. B./Basegio, T. M./Clemens, F. J./Alves, A. K./et al.**
Facile synthesis by peroxide method and microwave–assisted hydrothermal treatment of TiO₂ with high photocatalytic efficiency for dye degradation and hydrogen production. *Chem. Sel.* 2018, 3 (41), 11454–11459. ▲
- Gorjan, L./Reiff, L./Liersch, A./Clemens, F.**
Ethylene vinyl acetate as a binder for additive manufacturing of tricalcium phosphate bio–ceramics. *Ceram. Int.* 2018, 44 (13), 15817–15823. ▲
- Hadian, A./Zamani, C./Clemens, F. J.**
Effect of sintering temperature on microstructural evolution of M48 high speed tool steel bonded NbC matrix cemented carbides sintered in inert atmosphere. *Int. J. Refract. Met. Hard Mater.* 2018, 74, 20–27. ▲
- Jinisha, B./Anilkumar, K. M./Manoj, M./Abhilash, A./Pradeep, V. S./Jayalekshmi, S.**
Poly (ethylene oxide) (PEO)–based, sodium ion–conducting, solid polymer electrolyte films, dispersed with Al₂O₃ filler, for applications in sodium ion cells. *International Journal of Ionics* 2018, 24, 1675–1683 ▲
- Kim, B. J./Cheng, X./Abbott, D. F./Fabbri, E./Bozza, F./Graule, T./Castelli, I. E./Wiles, L./Danilovic, N./Ayers, K. E./et al.**
Highly active nanoperovskite catalysts for oxygen evolution reaction: insights into activity and stability of Ba_{0.5}Sr_{0.5}Co_{0.8}Fe_{0.2}O_{2+ δ} and PrBaCo₂O_{5+ δ} . *Adv. Funct. Mater.* 2018, 28 (45), 1804355 (10 pp.). ▲

- Kozielski, L./Feliksik, K./Wodecka-Duś, B./Szalbot, D./Tutu, S.**
Hot pressed K_{0.5}Na_{0.5}NbO₃ material for piezoelectric transformer for energy harvesting. Arch. Metall. Mater. 2018, 63 (3), 1275–1280. ▲
- Kozielski, L./Płońska, M./Sebastian, T./Clemens, F.**
Dielectric relaxation of Bi₄Ti₃O₁₂ ceramics prepared by the low-temperature combustion synthesis. Phase Transit. 2018, 91 (9–10), 1081–1091. ▲
- Lugovy, M./Aman, A./Orlovskaya, N./Slyunyayev, V./Graule, T./Kuebler, J./Reece, M. J./Chen, Y./Ma, D./An, K.**
Time and frequency dependent mechanical properties of LaCoO₃-based perovskites: neutron diffraction and domain mobility. J. Appl. Phys. 2018, 124 (20), 205104 (9 pp.). ▲
- Lugovy, M./Orlovskaya, N./Pathak, S./Radovic, M./Lara-Curzio, E./Verbylo, D./Kuebler, J./Graule, T./Reece, M. J.**
Time and frequency dependent mechanical properties of LaCoO₃-based perovskites: internal friction and negative creep. J. Appl. Phys. 2018, 124 (20), 205103 (8 pp.). ▲
- Lugovy, M./Orlovskaya, N./Slyunyayev, V./Mitrentsis, E./Neumann, M./Aneziris, C. G./Jelitto, H./Schneider, G. A./Kuebler, J.**
Comparative study of static and cyclic fatigue of ZrB₂-SiC ceramic composites. J. Eur. Ceram. Soc. 2018, 38 (4), 1128–1135. ▲
- Lusiola, T./Gorjan, L./Clemens, F.**
Preparation and characterization of potassium sodium niobate nanofibers by electrospinning. Int. J. Appl. Ceram. Technol. 2018, 15 (5), 1292–1300. ▲
- Lusiola, T./Oberle, S./Gorjan, L./Clemens, F.**
Effect of polymer-ceramic fibre interphase design on coupling factor in low fibre volume content piezoelectric composites. Adv. Mater. Sci. Eng. 2018, 2018, 6465783 (8 pp.). ▲
- Maabong, Kelebogile/Machatine, Augusto G. J./Mwanemwa, Benard S./Braun, Artur/Bora, Debajeet K./Toth, Rita/Diale, Mmantsae**
Nanostructured hematite thin films for photoelectrochemical water splitting. Physica B: Condensed Matter 2018, 535, 67–71 ▲
- Madiba, I. G./Braun, A./Émond, N./Chaker, M./Tadadjeu, S. I./Khanyile, B. S./Maaza, M.**
Resonant photoemission spectroscopy of gamma irradiated VO₂ films. MRS Adv. 2018, 3 (42–43), 2499–2503.
- Manoj, M./Jasna, M./Anilkumar, K. M./Abhilash, A./Jinisha, B./Pradeep, V. S./Jayalekshmi, S.**
Sulfur-polyaniline coated mesoporous carbon composite in combination with carbon nanotubes interlayer as a superior cathode assembly for high capacity lithium-sulfur cells. Appl. Surf. Sci. 2018, 458, 751–761. ▲
- Michálek, Martin/Michálková, Monika/Blugan, Gurdial/Kuebler, Jakob**
Effect of carbon contamination on the sintering of alumina ceramics. Journal of the European Ceramic Society 2018, 38, 193–199. ▲
- Michálek, Martin/Michálková, Monika/Blugan, Gurdial/Kuebler, Jakob**
Strength of pure alumina ceramics above 1 GPa. Ceramics International 2018, 44 (3), 3255–3260. ▲
- Michálková, M./Michálek, M./Blugan, G./Kuebler, J.**
The influence of spinel and magnesia powder bed on mechanical properties of alumina sintered under air and nitrogen atmosphere. Adv. Appl. Ceram. 2018, 117 (8), 485–492. ▲
- Ozóg, P./Kata, D./Graule, T.**
Tape casting of UV-curable aluminium nitride-based slurries. Ceram. Int. 2018, 44 (18), 22800–22807. ▲
- Rowthu, S./Saeidi, F./Wasmer, K./Hoffmann, P./Kuebler, J.**
Flexural strength evaluations and fractography analyses of slip cast mesoporous submicron alumina. Ceram. Int. 2018, 44 (5), 5193–5201. (joint paper) ▲
- Sasikumar, P. V. W./Blugan, G./Casati, N./Kakkava, E./Panusa, G./Psaltis, D./Kuebler, J.**
Polymer derived silicon oxycarbide ceramic monoliths: microstructure development and associated materials properties. Ceram. Int. 2018, 44 (17), 20961–20967. ▲
- Schabikowski, M./Niznik, A./Kata, D./Graule, T.**
The adsorption of polystyrene nanoparticles on selected commercially available fibers: a streaming potential study. Text. Res. J. 2017, 88 (24), 2841–2853. ▲
- Simfukwe, J./Mapasha, R. E./Braun, A./Diale, M.**
Density functional theory study of Cu doped {0001} and {0112} surfaces of hematite for water splitting. MRS Adv. 2018, 3 (13), 669–678.
- Szekeres, G. P./Nemeth, Z./Schrantz, K./Hernadi, K./Graule, T.**
Insights into pore size control in cellulose nanopapers through modeling and experiments. J. Nanosci. Nanotechnol. 2018, 18 (4), 3000–3005. ▲
- Szekeres, G. P./Németh, Z./Schrantz, K./Németh, K./Schabikowski, M./Traber, J./Pronk, W./Hernádi, K./Graule, T.**
Copper-coated cellulose-based water filters for virus retention. ACS Omega 2018, 3 (1), 446–454.
- Arraigada, M./Piemontese, F./Hugener, M./Partl, M. N.**
Field validation of high content recycled asphalt concrete mixtures with accelerated pavement testing. Presented at the ISAP conference 2018, Fortaleza, Brazil, June 19–21, 2018/International Society for Asphalt Pavement (ISAP)/pp 1–7.

- Canestrari, F./D'Andrea, A./Ferrotti, G./Graziani, A./Partl, M. N./Petit, C./Raab, C./Sangiorgi, C.**
Advanced interface testing of grids in asphalt pavements. In Testing and characterization of sustainable innovative bituminous materials and systems/Partl, M. N., Porot, L., Di Benedetto, H., Canestrari, F., Marsac, P., Tebaldi, G., Eds./RILEM state-of-the-art reports, Vol. 24/Springer: Cham, 2018/pp 127–202.
- Cavalli, M. C./Zaumanis, M./Mazza, E./Partl, M. N./Poulikakos, L. D.**
Aging effect on rheology and cracking behaviour of reclaimed binder with bio-based rejuvenators. *J. Clean. Prod.* 2018, 189, 88–97. (joint paper) ▲
- Cavalli, M. C./Zaumanis, M./Mazza, E./Partl, M. N./Poulikakos, L. D.**
Effect of ageing on the mechanical and chemical properties of binder from RAP treated with bio-based rejuvenators. *Composites B* 2018, 141, 174–181. (joint paper) ▲
- Desseaux, S./dos Santos, S./Geiger, T./Tingaut, P./Zimmermann, T./Partl, M. N./Poulikakos, L. D.**
Improved mechanical properties of bitumen modified with acetylated cellulose fibers. *Composites B* 2018, 140, 139–144. (joint paper) ▲
- Fadil, H./Jelagin, D./Larsson, P. L./Partl, M. N.**
Multi-scale characterization of asphalt mortar with indentation test. Presented at the ISAP Conference 2018, Fortaleza, Brazil, June 19–21, 2018/pp 1–7.
- Ferrotti, G./Baaj, H./Besamusca, J./Bocci, M./Cannone-Falchetto, A./Grenfell, J./Hofko, B./Porot, L./Poulikakos, L./You, Z.**
Comparison between bitumen aged in laboratory and recovered from HMA and WMA lab mixtures. *Mater. Struct.* 2018, 51, 150 (13 pp.). ▲
- Graziani, A./Di Benedetto, H./Perraton, D./Sauzéat, C./Hofko, B./Nguyen, Q. T./Pouget, S./Poulikakos, L. D./Tapsoba, N./Grenfell, J./et al.**
Three-dimensional characterisation of linear viscoelastic properties of bituminous mixtures. In Testing and characterization of sustainable innovative bituminous materials and systems/Partl, M. N., Porot, L., Di Benedetto, H., Canestrari, F., Marsac, P., Tebaldi, G., Eds./RILEM state-of-the-art reports, Vol. 24/Springer: Cham, 2018/pp 75–125.
- Hofko, B./Porot, L./Falchetto Cannone, A./Poulikakos, L./Huber, L./Lu, X./Mollenhauer, K./Grothe, H.**
FTIR spectral analysis of bituminous binders: reproducibility and impact of ageing temperature. *Mater. Struct.* 2018, 51 (2), 45 (16 pp.). ▲
- Hugener, M./Mohn, J./Zeyer, K.**
Reduced emissions of warm mix asphalt during construction. Presented at the ISAP conference 2018, Fortaleza, Brazil, June 19–21, 2018/pp 1–7. (joint paper)
- Jeoffroy, E./Bouville, F./Bueno, M./Studart, A. R./Partl, M. N.**
Iron-based particles for the magnetically-triggered crack healing of bituminous materials. *Constr. Build. Mater.* 2018, 164, 775–782. ▲
- Kakar, M. R./Hamzah, M. O./Valentin, J.**
Analyzing the stripping potential of warm mix asphalt using imaging technique. Presented at the Building up efficient and sustainable transport infrastructure 2017 (BESTInfra2017), Prague, Czech Republik, September 21–22, 2017/IOP Publishing: Bristol/Vol. 236, p 012013 (13 pp.).
- Lal, Sreeyuth/Lucci, Francesco/Defraeye, Thijs/Poulikakos, Lily D./Partl, Manfred N./Derome, Dominique/Carmeliet, Jan**
CFD modeling of convective scalar transport in a macroporous material for drying applications. *International Journal of Thermal Sciences* 2018, 123, 86–98. (joint paper) ▲
- Loderer, C./Partl, M. N./Poulikakos, L. D.**
Effect of crumb rubber production technology on performance of modified bitumen. *Constr. Build. Mater.* 2018, 191, 1159–1171. ▲
- Olsson, E./Jelagin, D./Partl, M.**
Discrete element study of aggregate damage during asphalt compaction. Presented at the ISAP conference 2018, Fortaleza, Brazil, June 19–21, 2018/p (7 pp.).
- Partl, M. N.**
Towards improved testing of modern asphalt pavements. *Mater. Struct.* 2018, 51, 166 (12 pp.). ▲
- Partl, M. N. I**
Introduction. In Testing and characterization of sustainable innovative bituminous materials and systems/Partl, M. N., Porot, L., Di Benedetto, H., Canestrari, F., Marsac, P., Tebaldi, G., Eds./RILEM state-of-the-art reports, Vol. 24/Springer: Cham, 2018/pp 1–14.
- Partl, Manfred N./Porot, Laurent/Di Benedetto, Hervé/Canestrari, Francesco/Marsac, Paul/Tebaldi, Gabriele**
Testing and characterization of sustainable innovative bituminous materials and systems. State-of-the-art report of the RILEM technical committee 237–SIB/Partl, M. N., Porot, L., Di Benedetto, H., Canestrari, F., Marsac, P., Tebaldi, G., Eds./RILEM state-of-the-art reports, Vol. 24/Springer: Cham, 2018/300 p.
- Petit, C./Chabot, A./Destrée, A./Raab, C.**
Recommendation of RILEM TC 241–MCD on interface debonding testing in pavements. *Mater. Struct.* 2018, 51 (4), 96 (11 pp.). ▲
- Petit, C./Chabot, A./Destrée, A./Raab, C.**
Interface debonding behavior. In Mechanisms of cracking and debonding in asphalt and composite pavements. State-of-the-art of the RILEM TC 241–MCD/Buttlar, W. G., Chabot, A., Dave, E. V., Petit, C., Tebaldi, G., Eds./RILEM state-of-the-art reports, Vol. 28/Springer: Cham, 2018/pp 103–153.

Porot, L./Soenen, H./Besamusca, J./Apeageyi, A./Grenfell, J./Vansteenkiste, S./Chailleux, E./Gaudefroy, V./Chaturabong, P./Tozzo, C./et al.

Bituminous binder. In Testing and characterization of sustainable innovative bituminous materials and systems/Partl, M. N., Porot, L., Di Benedetto, H., Canestrari, F., Marsac, P., Tebaldi, G., Eds./RILEM state-of-the-art reports, Vol. 24/Springer: Cham, 2018/pp 15–74.

Poulikakos, L./Heutschi, K./Soltic, P./Cerny, I./Lees, A./van Loo, H./Mayer, R.

Defining road and rail vehicles with a low environmental footprint. Final report/2018/34 p. (joint paper)

Poulikakos, L./Zaumanis, M./Cavalli, M. C./Munoz Fernandez, M./Heeb, N.

Sustainable fully recycled asphalt concrete. Final report/sine nomine, 2018/80 p. (joint paper)

Raab, C./Partl, M. N.

Structural resistance of bridge deck pavement systems. Presented at the ISAP Conference 2018, Fortaleza, Brazil, June 19–21, 2018/pp 1–7.

Raab, C./Partl, M. N./Abd El Halim, O./Ducasse, L.

Assessment of interlayer bonding properties with dynamic testing. Presented at the ISAP Conference 2018, Fortaleza, Brazil, June 19–21, 2018/p (7 pp.)–7.

Raab, Christiane/Fourquet, Elise/El Halim, Omar Abd/Partl, Manfred N.

Assessment of interlayer bonding properties with static and dynamic devices. In Louay, Mohammad (Eds.), Advancement in the design and performance of sustainable asphalt pavements 2018 (pp. 244–255).

Refaa, Z./Kakar, M. R./Stamatiou, A./Worlitschek, J./Partl, M. N./Bueno, M.

Numerical study on the effect of phase change materials on heat transfer in asphalt concrete. Int. J. Therm. Sci. 2018, 133, 140–150. ▲

Tebaldi, G./Dave, E. V./Cannone Falchetto, A./Hugener, M./Perraton, D./Grilli, A./Lo Presti, D./Pasetto, M./Loizos, A./Jenkins, K./et al.

Recommendation of RILEM TC237–SIB: protocol for characterization of recycled asphalt (RA) materials for pavement applications. Mater. Struct. 2018, 51 (6), 142 (8 pp.). ▲

Tebaldi, G./Dave, E./Cannone Falchetto, A./Hugener, M./Perraton, D./Grilli, A./Lo Presti, D./Pasetto, M./Loizos, A./Jenkins, K./et al.

Recommendation of RILEM TC237–SIB on cohesion test of recycled asphalt. Mater. Struct. 2018, 51 (5), 117 (6 pp.). ▲

Tebaldi, G./Dave, E./Hugener, M./Cannone Falchetto, A./Perraton, D./Grilli, A./Lo Presti, D./Pasetto, M./Loizos, A./Jenkins, K./et al.

Cold recycling of reclaimed asphalt pavements. In Testing and characterization of sustainable innovative bituminous materials and systems/Partl, M. N., Porot, L., Di Benedetto, H., Canestrari, F., Marsac, P., Tebaldi, G., Eds./RILEM state-of-the-art reports, Vol. 24/Springer: Cham, 2018/pp 239–296.

Wang, D./Cannone Falchetto, A./Riccardi, C./Schrader, J./Hofko, B./Poulikakos, L./Wistuba, M. P.

Rheological modelling of asphalt binder under different short and long-term aging conditions. Presented at the Transportation research board 97th annual meeting, Washington, DC, USA, January 7–11, 2018/National Academy of Sciences: Washington, DC/p (18 pp.).

Wang, D./Cannone Falchetto, A./Riccardi, C./Wistuba, M. P./Poulikakos, L./Hofko, B.

Investigation on the effect of cooling medium and aging condition on low-temperature properties of asphalt binder based on BBR. Presented at the ISAP conference 2018, Fortaleza, Brazil, June 19–21, 2018/p (8 pp.).

Zaumanis, M./Cavalli, M. C./Poulikakos, L. D.

Design of 100% RAP hot-mix asphalt to balance rutting and cracking performance. Presented at the ISAP conference 2018, Fortaleza, Brazil, June 19–21, 2018/p (7 pp.).

Zaumanis, M./Poulikakos, L. D./Partl, M. N.

Performance-based design of asphalt mixtures and review of key parameters. Mater. Des. 2018, 141, 185–201. ▲

Corporate Services

Burtscher, H./Mayer, A./Loretz, S./Kasper, M./Czerwinski, J.

High air pollution in vehicle cabins due to traffic nanoparticle emission exposure and a solution for in-use vehicles. In International automotive conference (KONMOT2018), presented at the International automotive conference (KONMOT2018), Cracow, September 13–14, 2018/IOP conference series: materials science and engineering/IOP, 2018/Vol. 421, p 032018 (11 pp.).

Empa Activities 2018

Conferences

General Management

Buchmann Brigitte

Entstehung/Entwicklung und Messstrategie des NABEL, lokale und globale Aspekte. 40 Jahre NABEL, Bern, 01-18
 ● ○

Buchmann Brigitte

"Einführung in das Ressourcenforum Schweiz." Ressourcenforum Schweiz, Dübendorf, 10-25 ● ○

Buchmann Brigitte

"Plattform Mobilität der Zukunft –Move." Energiefachstellenleitertagung Ostschweiz, Empa Dübendorf, 11-01 ● ○

Dommann Alex

Translation Session 1: Interfaces in the education and translation from science & technology to clinics & market. Biointerfaces International 2018, Zurich, 08-15 ▲ ○

Dommann Alex

Die Bedeutung der Grenzflächen im Grenzgebiet des Rheintals. Rhytalk/RhySearch Forschungs- und Innovationszentrum Rheintal, Balzers, LI, 12-13 ● ○

Dommann Alex/Neels Antonia

Conference BIO-X: The exciting world of Biology seen by X-rays, St.Gallen, 03-16 ■

Dommann Alex/Neels Antonia

Complete X-Ray analysis to control SiGe growth Center for X-Ray Analytics. Lawrence Symposium on Epitaxy, Scottsdale, Arizona, US, 02-18 to 02-21 ● ○

Dommann Alex/Neels Antonia

Contributions of X-ray analytical methods to biology and biomedicine. 3rd Erwin Schrödinger Symposium 2018, Dornbirn, AT, 07-02 to 07-04 ● ○

Dommann Alex/Neels Antonia

X-Ray analysis for advanced packaging. IRSP 2018, Singapore, SG, 01-30 to 02-01 ● ○

Dommann Alex/Rossi René M.

Textilien unter der Lupe – Röntgenanalysen für die Fasern der Zukunft. 18. Textilsymposium armasuisse, Bern, 03-14 ● ○

Dommann Alex/Rossi René M.

Neues Gewebe für Astronauten und Sportler. SATW TecDay 2018, Luzern, 04-25 ● ○

Richner Peter

NEST – Boosting Innovation in the Construction Sector. 8th ECTP Conference, Brussels, BE, 11-13 to 11-14 ● ○

Advanced Materials and Surfaces

Arabi-Hashemi Ariyan/Leinenbach Christian

FeMnSi based shape memory alloys for civil engineering applications. HTSMAs 2018-2nd International Conference on High Temperature Shape Memory Alloys, Irsee, DE, 05-15 to 05-18 ●

Griffiths Seth/Rossel Marta/Croteau Joe/Leinenbach Christian/Vo Nhon/Seidman David/Dunand David

Additive Manufacturing of L12 Strengthened Aluminum Superalloy Addalloy™. TMS Annual Meeting 2018, Phoenix, US, 03-11 to 03-15 ●

Griffiths Seth/Marta Rossel/Nhon Vo/Joe Croteau/David Seidman/David Dunand/Christian Leinenbach

Additive Manufacturing of L12 Strengthened Aluminum Superalloy Addalloy™. The Minerals, Metals & Materials Society (TMS) Conference 2018, Phoenix Arizona, US, 03-11 to 03-15 ●

Griffiths Seth/Marta Rossel/Nhon Vo/Joe Croteau/David Seidman/David Dunand/Christian Leinenbach

Additive Manufacturing of L12 Strengthened Aluminum Superalloy Addalloy™. Alloys for additive Manufacturing Symposium 2018, University of Sheffield, GB, 09-03 to 09-04 ●

Griffiths Seth/Rossel Marta D./Vo Nhon/Croteau Joe/Seidman David/Dunand David/Leinenbach Christian

Additive Manufacturing of L12 Strengthened Aluminum Superalloy Addalloy™. AAMS18 –Alloys for Additive Manufacturing Symposium, Sheffield, GB, 09-03 to 09-04 ●

Hoffmann Patrik

3D printing & micromachining. Open Innovation day 2018, Medtronic Tolochenaz, 05-03 ● ○

Hoffmann Patrik

Deposition Processes @ Empa. US-AFRL workshop, US-AFRL Dayton Ohio, US, 04-17 ● ○

Hoffmann Patrik

Oberflächen mittels 3D-Druck gestalten. Technology Briefing: Innovative, funktionelle Beschichtungen, Thun, 11-14 ● ○

Advanced Materials Processing

Hoffmann Patrik SwissPhotonics conference at EPHJ – EPMT – SMT Photonics 4 the European Industry of the Future, Palexpo Geneva, 06-13 ■
Kempe Philippe/Zhang Bin/Meylan Bastian/Wasmer Kilian Combined high vacuum high temperature tribometer with in-situ wear or Raman measurement. The 18 th Nordic Symposium on Tribology – NORDTRIB 2018, Uppsala, SE, 06-18 to 06-21 ●
Kwon Hansang/Park Jehong/Leparoux Marc/Silvain Jean-François/Kawasaki Akira Controlling of mechanical properties on the functionally graded dual-nanoparticles reinforced composites. Thermec'2018 – International Conference on Processing & Manufacturing of Advanced Materials, Paris, FR, 07-09 to 07-13 ● ○
Lanfant Briac/Mohanta Antaryami/Leparoux Marc Development and monitoring of laser direct metal power deposition process. Nano-Carbon Enhanced Materials (NCEM) consortium 6-2, Freising, DE, 06-20 ● ○
Lanfant Briac/Mohanta Antaryami/Leparoux Marc ICP Pilot Plant: a versatile tool for nanoparticles synthesis, functionalisation and spheroidisation. NanoLeap Open Day Workshop 2018, Freising, DE, 07-19 ◆ ○
Lanfant Briac/Mohanta Antaryami/Leparoux Marc LAMP's activities presentation on LMD process. BeAM customer Day-first edition, Strasbourg, FR, 03-27 ● ○
Leinenbach Christian Additive manufacturing of precious metals – challenges and opportunities for watch and jewelry applications. Photonics 4 the European Industry of the Future, Geneva, 06-13 ● ○
Leinenbach Christian Designing Novel Alloys for Laser Additive Manufacturing – challenges and opportunities. Seminar Talk Materials Science Division, Lawrence Livermore National Laboratories (LLNL), Livermore, US, 01-25 ● ○
Leinenbach Christian In situ investigation of the phase and microstructure formation in alloys under laser additive manufacturing conditions. ESRF Annual User Meeting 2018, Grenoble, FR, 02-05 to 02-07 ● ○
Leinenbach Christian Iron-based shape memory alloys (Fe-SMA) – a new material for pre-stressing of civil engineering structures. Voestalpine Synergieplattform – Materials of the Future, Vienna, AT, 05-29 to 05-30 ● ○
Leinenbach Christian Optimizing alloys for laser additive manufacturing. SPIE Photonics West, San Francisco, US, 01-29 to 02-01 ● ○
Leinenbach Christian/Carpenter John S./Beese Allison/Bourell David/Sears James W./Tuck Christopher Additive Manufacturing: Building the Pathway towards Process and Material Qualification. TMS Annual Meeting 2018, Phoenix, US, 03-11 to 03-15 ■
Leinenbach Christian/Ivas Toni/Le Dantec Marie/Hoffmann Patrik Modeling and simulation of phase and microstructure formation in Ni and Ti alloys during AM using finite elements, computational thermodynamics and phase field simulation. TMS Annual Meeting 2018, Phoenix, US, 03-11 to 03-15 ● ○
Leinenbach Christian/Kenel Christoph/Griffiths Seth Influence of re-scanning on defects and grain microstructure in SLM parts. AAMS18 – Alloys for Additive Manufacturing Symposium, Sheffield, GB, 09-03 to 09-04 ●
Leparoux Marc/Kallip Kaspar/Kwon Hansang/Kollo Lauri/AIOgab Khaled/Babu Kishore Simple powder metallurgy route for processing Aluminium nanocomposites exhibiting outstanding mechanical properties. Thermec'2018, International Conference on Processing & Manufacturing of advanced Materials, Paris, FR, 07-09 to 07-13 ● ○
Le-Quang Tri/Shevchik Sergey/Meylan Bastian/Olbinado Margie/Rack Alexander/Wasmer Kilian In Situ and Real-Time Quality Monitoring of AM/Laser Process. Materials Science and Engineering – MSE 2018, Darmstadt, DE, 09-26 to 09-28 ●
Le-Quang Tri/Shevchik Sergey/Meylan Bastian/Vakili-Farahani Farzad/Olbinado Margie/Rack Alexander/Wasmer Kilian Why is in situ quality control of laser keyhole welding a real challenge? 10 th Conference on Photonic Technologies – LANE 2018, Fürth, DE, 09-03 to 09-06 ●
Li Xiaoshuang/Spierings Adriaan B./Wegener Konrad/Leinenbach Christian Rapid solidification of Cu-Sn(-Ti) based alloys: towards alloy design for selective laser melting. Minerals, Metals & Materials Society (TMS 2018), Phoenix, US, 03-11 to 03-15 ●
Li Xiaoshuang/Griffiths Seth/Spierings Adriaan B./Wegener Konrad/Leinenbach Christian Selective Laser Melting of Tin Bronze based Metal-Diamond Composites. Alloys for Additive Manufacturing Symposium 2018 (AAMS2018), Sheffield, GB, 09-03 to 09-04 ◆
Li Xiaoshuang/Griffiths Seth/Spierings Adriaan B./Wegener Konrad/Leinenbach Christian Selective laser melting of tin bronze based metal-diamond composites. AAMS18 – Alloys for Additive Manufacturing Symposium, Sheffield, GB, 09-03 to 09-04 ◆

<p>Matthews Manyalibo /Guss Gabe/Achee Thomas/Calta Nicholas/Shevchik Sergey/Khairallah Saad/Elwany Alaa/Leinenbach Christian/Wasmer Kilian Characterization of In Situ Diagnostics Using High Speed Imaging. 2018 Annual International Solid Freeform Fabrication Symposium (SFF Symp 2018), Austin, US, 08-13 to 08-15 ● ○</p>
<p>Mohanta Antaryami/Lanfant Briac/Leparoux Marc Optical emission spectroscopy and imaging during synthesis of Nanoparticles, Laser Welding and Additive Manufacturing. Advanced Manufacturing: A Challenge for Materials Science, Dübendorf, 10-24 ◆ ○</p>
<p>Mohanta Antaryami/Marc Leparoux/Lanfant Briac Understanding chemical kinetics of CH₄ and C₂H₂ dissociation by optical emission spectroscopy during graphene nano-flakes production in an inductively coupled plasma reactor. HTPP 15 (High-Tech Plasma Processes 15) , Toulouse, FR, 07-02 to 07-06 ●</p>
<p>Mohanta Antaryami/Lanfant Briac/Leparoux Marc Spectroscopic investigation of inductively coupled plasma for understanding synthesis process of graphene nano-flakes. 5th International Workshop – Plasma Science & Interfaces 2018, St. Gallen, 10-18 to 10-19 ● ○</p>
<p>Rowthu Sriharitha/Hoffmann Patrik Extremely mechanically robust self-healable slippery surfaces fabricated from liquid impregnated untextured porous alumina. School on “Wetting and modeling of lubricant impregnated surfaces”, Max Planck Institute for Polymer Research Mainz, DE, 11-19 to 11-20 ◆</p>
<p>Shevchik Sergey/Le Quang Tri/Wasmer Kilian/Meylan Bastian Acoustic emission for insitu monitoring of laser processing. EWGAE – 33rd European conference on acoustoic emission testing, Senlis, FR, 09-12 to 09-14 ●</p>
<p>Shevchik Sergey/Le Quang Tri/Wasmer Kilian Machine learning: a new paradigm for process monitoring in Industry 4.0. 26th Conference on Advanced nanotechnology, 2nd edition of international conference on Materials technology and manufacturing innovation, Moscow, RU, 10-04 to 10-05 ●</p>
<p>Tang Yinglu/Li X/Martin L./Leinenbach C./Ivas T./Anand S./Snyder J./Battaglia C. Ni-interstitials Making Strong Influence on Thermoelectric Properties of TiNiSn Half Heuslers. TMS Annual Meeting 2018, Phoenix, US, 03-11 to 03-15 ●</p>
<p>Tri Le-Quang/Sergey Shevchik/Bastian Meylan/Margie Olbinado/Alexander Rack/Kilian Wasmer In-situ quality monitoring of laser keyhole welding: a real challenge? MSE congress, Darmstadt, DE, 09-26 to 09-28 ●</p>
<p>Wasmer Kilian In situ real-time monitoring of defect formation during AM. Empa Topical Day – Additive Manufacturing II, Dübendorf, 01-18 ● ○</p>
<p>Wasmer Kilian/Le Quang Tri/Meylan Bastian/Vakili-Farahani Farzad/Leinenbach Christian/Olbinado Margie P./Rack Alexander/Shevchik Sergey A. AM/LW process monitoring combining high-speed X-ray imaging, acoustic & optical sensors and artificial intelligence. ESRF User Meeting 2018, Grenoble, FR, 02-05 to 02-07 ◆ ○</p>
<p>Wasmer Kilian High-Speed X-Ray Imaging for Correlating Acoustic Signals with Quality Monitoring: A Machine Learning Approach. Material Science & Technology Conference 2018 (MS&T18), Columbus, US, 10-15 to 10-18 ●</p>
<p>Wasmer Kilian In situ and real-time investigation of AM process by combining high-speed X-ray imaging, acoustic and optical sensors and machine learning. Minerals, Metals & Materials Society (TMS 2018), Phoenix, US, 03-11 to 03-15 ● ○</p>
<p>Wasmer Kilian/Le-Quang Tri/Meylan Bastian/Vakili-Farahani Farzad/Olbinado Margie/Rack Alexander/Shevchik Sergey Laser welding quality monitoring by combining high-speed X-ray imaging, acoustic sensors and machine learning. 10th Conference on Photonic Technologies – LANE 2018, Fürth, DE, 09-03 to 09-06 ●</p>
<p>Wasmer Kilian/Meylan Bastian Measurements and Analysis with New Ball-On-Disk Vacuum Tribometer with insitu Measurement of the Wear Track by Digital Holographic Microscopy. Anton Paar User Meeting 2018, Morges, 01-31 to 02-01 ● ○</p>
<p>Wasmer Kilian/Saeidi Fatemeh/Meylan Bastian/Le Quang Tri/Shevchik Sergey A. When AE (Acoustic Emission) Meets AI (Artificial Intelligence) II. 33rd European Conference on Acoustic Emission Testing (EWGAE 2018), Senlis, FR, 09-12 to 09-14 ● ○</p>
<p>Zhang Bin/Meylan Bastian/Wasmer Kilian/Cuche Etienne A New Ball-On-Disk Vacuum Tribometer With In Situ Measurement Of The Wear Track By Digital Holographic Microscopy. 6th Asia International Conference on Tribology (ASIATRIB2018), Sarawak, MY, 09-17 to 09-20 ● ○</p>
<p>Zweierack Kai/Griffiths Seth/Li Xiaoshuang/Kenel Christoph/Grolimund Daniel/Ferreira Sanchez Dario/McKeown Joseph/Leinenbach Christian Mimicking and investigating the complex thermal exposure of AM processes utilizing high spatio-temporal in-situ DTEM and in-situ synchrotron X-Ray techniques for Al based alloys. AAMS18 – Alloys for Additive Manufacturing Symposium, Sheffield, GB, 09-03 to 09-04 ◆</p>

<p>Erni Rolf/Keller Debora/Rossell Marta/Zhang Yucheng/Ahmad Nabeel/Henninen Trond/Campanini Marco Advanced Analytics by Scanning Transmission Electron Microscopy. Seminar, Dectris Ltd., Baden, 06-28 🍷 ○</p>
<p>Erni Rolf Nucleation and growth of matter studied by in-situ (S)TEM. Seminar Universität Wien, Wien, AT, 01-19 🍷 ○</p>
<p>Ahmad Nabeel/Erni Rolf/Rossell Marta/Keller Debora In situ Template Assisted Growth of Ag@Au Bimetallic Nanostructures. CISCEM (Conference on In situ and Correlative Electron Microscopy), Saarbrücken, DE, 10-10 to 10-12 🍷</p>
<p>Ahmad Nabeel/Erni Rolf/Keller Debora/Rossell Marta/Nelayah Jason/Ricolleau Christian/Alloyeau/Damien. Nanoscale Liquid Phase In situ Observations of Structural Transformations of Au and Au-Cu Nanostructures. IMC 19, Sydney, AU, 09-10 to 10-15 🍷</p>
<p>Arroyo Rojas Dasilva Yadira/Rossell Marta/Isa Fabio/Isella Giovanni/von Känel Hans/Gröning Pierangelo/Erni Rolf Structural defects at a diffused Ge/Si interface by HAADF-STEM. International conference of extended defects in semiconductors., Thessaloniki, GR, 06-24 to 06-29 🍷</p>
<p>Bologna Nicolas/Wirths Stephan/Francaviglia Luca/Campanini Marco/Schmid Heinz/Theofylaktopoulos Vasileios/Moselund Kirsten/Fontcuberta i Morral Anna/Erni Rolf/Riel Heike/Rossel D. Marta Dopant-induced modification of GaIn(1-x)P nanowire-based p-n junctions monolithically integrated on Si (111). International Microscopy Congress 19 , Sydney, AU, 09-09 to 09-14 🍷</p>
<p>Campanini Marco/Erni Rolf/Rossell Marta D. Direct Imaging of Polarization Gradients by Atomic Resolution Differential-Phase Contrast STEM. 19th International Microscopy Conference (IMC19), Sydney, AU, 09-09 to 09-14 🍷</p>
<p>Erni Rolf Basics of TEM and STEM. CCMX Advanced Course: Combining Structural & Analytical Investigations of Matter, ETH Zurich, 11-05 to 11-09 🍷 ○</p>
<p>Erni Rolf Unconventional Imaging by Scanning Transmission Electron Microscopy. 20th YUCOMAT 2018, Herceg Novi , CS, 09-03 to 09-07 🍷 ○</p>
<p>Erni Rolf Valence Electron Energy-Loss Spectroscopy. SuperSTEM Summer School, Daresbury, GB, 06-29 to 07-04 🍷 ○</p>
<p>Erni Rolf/Campanini/Marco/Bon/Marta/Rossell/Marta Possibilities of Differential Phase Contrast STEM to Study Functional Oxides. Electron Microscopy of Nanostructures Conference, ELMINA 2018, Belgrade, CS, 08-26 to 08-29 🍷 ○</p>
<p>Erni Rolf/Keller Debora/Rossell Marta/Zhang Yucheng/Ahmad Nabeel/Henninen Trond/Campanini Marco Advanced Analytics by Scanning Transmission Electron Microscopy. Nanoconvention, Zurich, 06-06 to 06-07 🍷 ○</p>
<p>Henninen Trond/Keller Debora/Bon Marta/Ahmad Nabeel/Wang Feng/Passerone Daniele/Erni Rolf Dynamics and crystallinity of sub-nm Pt clusters at elevated temperatures. IN-SITU WORKSHOP Electron Microscopy Center, Empa Dübendorf & Protochips, Empa, 10-16 to 10-17 🍷</p>
<p>Henninen Trond/Bon Marta/Passerone Daniele/Erni Rolf Temperature Dependent Quasimolten Crystallinity of sub-nm Pt and Au Clusters Observed in 3D by Dynamic Scanning Transmission Electron Microscopy. Swiss NanoConvention 2018, ETH Zürich, 06-06 to 06-07 🍷</p>
<p>Henninen Trond/Bon Marta/Passerone Daniele/Erni Rolf Temperature Dependent Quasimolten Crystallinity of Sub-nm Pt and Au Clusters Observed in 3D by Fast Dynamic STEM. ELMINA2018, 1st International Conference on Electron Microscopy of Nanostructures, University of Belgrade, Belgrade, CS, 08-27 to 08-29 🍷</p>
<p>Henninen Trond/Bon Marta/Passerone Daniele/Erni Rolf Temperature Dependent Quasimolten Crystallinity of sub-nm Pt and Au Clusters Observed in 3D by Fast Dynamic STEM. SCANDEM 2018, DTU Copenhagen, DK, 06-26 to 06-28 🍷</p>
<p>Keller Debora/Zhang Yucheng/Rossell Marta D./Erni Rolf Gold Nanoparticle Growth in Liquid Cell Transmission Electron Microscopy: From a Systematic Study to Engineered Nanostructures. Microscopy Characterisation of organic-inorganic Interfaces, London, Queen Mary University, GB, 02-22 to 02-23 🍷</p>
<p>Keller Debora/Henninen Trond/Erni Rolf In Situ Gold Nanoparticle Formation in a Free-Standing Ionic Liquid Layer Triggered by Heat and Electron Irradiation. SCANDEM 2018, Technical University of Denmark, Copenhagen, DK, 06-25 to 06-28 🍷</p>
<p>Kozak Roksolana/Ivan Prieto/Christian Andres/Hans von Känel/Rolf Erni/Ivan Shorubalko/Marta D. Rossell/Gian-Luca Bona GaAs on Si backward nanodiodes towards high sensitivity photodetectors. EMRS 2018, Strasbourg, FR, 06-18 to 06-22 🍷</p>

Rossell Marta D.

Session Chair of "Atomic-scale Functional Imaging in Aberration-corrected Electron Microscopy." Microscopy and Microanalysis 2018, Baltimore, MD, US, 08-05 to 08-09 ▲

Rossell Marta D./Bologna Nicolas/Campanini Marco/Hébert Cécile/Passerone Daniele/Erni Rolf

Probing One-Dimensional Defects at the Atomic Scale by a Combination of Microscopy and Theory. 19th International Microscopy Congress (IMC19), Sydney, AU, 09-09 to 09-14 ● ○

Rossell Marta D./Campanini Marco/Nordlander Johanna/Trassin Morgan/Yang Chang-Ho/Ramesh Ramamoorthy/Fiebig Manfred/Erni Rolf

Complex Polar Atomic Displacements in Multiferroic Oxide Thin Films by STEM and In-situ Heating. IN-SITU WORKSHOP: Electron Microscopy Center, Empa Dübendorf & Protochips, Empa, 10-16 to 10-17 ●

Rossell Marta D./Campanini Marco/Nordlander Johanna/Trassin Morgan/Yang Chang-Ho/Ramesh Ramamoorthy/Fiebig Manfred/Erni Rolf

Scanning Transmission Electron Microscopy of Complex Polar Atomic Displacements in Multiferroic Oxide Thin Films. Gordon Research Conference on Multiferroic and Magnetoelectric Materials, Lewiston, ME, US, 08-05 to 08-10 ● ○

Rossell Marta D./Campanini Marco/Nordlander Johanna/Trassin Morgan/Yang Chan-Ho/Ramesh Ramamoorthy/Fiebig Manfred/Erni Rolf

Structural Studies of Ferroelectric Domains in Multiferroic Oxide Thin Films. 2018 MRS Spring Meeting, Phoenix, Arizona, US, 04-02 to 04-06 ● ○

Caspari Philip/Simon Dünki/Frank Nüesch/Dorina M. Opris

Cross-linking of polar polysiloxanes for dielectric elastomer transducers. SCS Fall Meeting 2018, Lausanne EPFL, 09-07 ◆

Heier Jakob

Nano- und mikrostrukturierte Beschichtungen und Oberflächen /gedruckte Elektronik. Materialinnovationen in der SMT-Fertigung –FH Nordwestschweiz, Windisch, 05-03 ●

Opris Dorina

Artificial muscles for medical applications. Élastomères et applications médicales: Quelles Innovations?, Lyon, FR, 06-07 ●

Opris Dorina/Dorina M. Opris/Frank Nüesch/Yauhen Sheima/Simon J. Dünki/Philip Caspari/Yee Song Ko/Elena Perju

Functional dielectric elastomers. PolyCall 2018, Lausanne, 12-05 ●

Perju Elena/Elena Perju/Eduard Cuervo-Reyes/Sergiu Shova/Dorina M. Opris

Synthesis of novel cyclosiloxane monomers containing push-pull moieties and their anionic ring opening polymerization. SCS Fall Meeting, Lausanne, 09-07 ◆

Anantharaman Surendra/Thilo Stöferle/Frank A. Nüesch/Rainer F. Mahrt/Jakob Heier

Enhancing Exciton Diffusion in Supramolecular Assemblies by Suppressing Non-radiative Decay. MRS Spring Meeting 2018, Arizona, US, 04-02 to 04-06 ●

Anantharaman Surendra/Nicolas Leclaire/Musen Li/Antonia Neels/Anna Véron/Jeffrey Reimers/Jakob Heier/Frank Nüesch

Excitonic Coupling in a Thin-Film Single Crystal of Cyanine Dye. MRS Spring Meeting 2018, Arizona, US, 04-02 to 04-06 ◆

Anantharaman Surendra/Anand Verma/Mohammed Makha/Frank A. Nüesch/Jakob Heier

Inkjet-printed Narrowband Organic Photodetectors with Color Selective Responsivity. MRS Spring Meeting 2018, Arizona, US, 04-02 to 04-06 ◆

Diethelm Matthias/Quirin Grossmann/Andreas Schiller/Evelyne Knapp/Sandra Jenatsch/Maciej Kawecki/Frank Nüesch/Roland Hany

Emission zone position in sandwich super yellow light-emitting electrochemical cells. SimOEP 2018, Winterthur, 09-04 to 09-06 ●

Diethelm Matthias/Quirin Grossman/Maciej Kawecki/Sandra Jenatsch/Frank Nüesch/Roland Hany

Revisiting the Super Yellow Light Emitting Electrochemical Cell – enhanced efficiency and lifetime. International Conference on Organic Electronics, Bordeaux, FR, 06-18 to 06-22 ◆ ○

Gesevicius Donatas/A. Neels/F. Nüesch/J. Heier

General Approach for an Efficient Anion Exchange in Organic Salt Semiconductors. 101st Canadian Chemistry Conference, Edmonton, Alberta, CA, 05-26 to 05-31 ●

Gesevicius Donatas/A. Neels/F. Nüesch/J. Heier

Physical Vapour Deposition of Cyanine Dye and First Application in Organic Electronics. Gordon Research Seminar and Conference on Solar Energy Conversion, Hongkong, HK, 06-16 to 06-22 ●

Hany Roland

Transparent Organic Optoelectronic Devices Using Near-Infrared Absorbing Dyes. EMRS, Strasbourg, FR, 06-18 to 06-22 ●

Hany Roland/Andrius Devizis/Sandra Jenatsch/Maciej Kawecki/Quirin Grossmann/Matthias Diethelm

Dynamics of charge distributions and emission zone in sandwich light-emitting electrochemical cells. Brazilian MRS Meeting, Natal, BR, 09-16 to 09-20 ●

Hany Roland/Matthias Diethelm Dynamics of charge distributions and emission zone in sandwich light-emitting electrochemical cells. MRS Meeting, Boston, US, 11-25 to 11-30 ◆
Hany Roland/Matthias Diethelm Dynamics of charge distributions and emission zone in sandwich light-emitting electrochemical cells. MRS Meeting, Boston, US, 11-25 to 11-30 ◆
Heier Jakob OPV ? ICSM, Busan, KR, 07-01 to 07-06 ▲
Heier Jakob/M. Makha/P. Schwaller/K. Strassel/S. Anantharaman/F. Nueesch/R. Hany Phase Control in A Ternary Organic Solar Cell Blend System by Ionic Interactions and Correlation between Phase and Efficiency. ICSM, Busan, KR, 07-01 to 07-06 ●
Heier Jakob/S. Anantharaman/K. Strassel/M. Makha/R. Hany/F. Nueesch Filter-Free Narrowband Organic Photodetectors with Color Selective Responsivity. ICSM, Busan, KR, 07-01 to 07-06 ●
Nüesch Frank Organic salt semiconductors with surprising optical and electronic properties. OSA 2018, Zürich, 09-02 to 09-05 ●
Nüesch Frank Organic salt semiconductors with surprising optical and electronic properties. Materials Science-2018, Amsterdam, NL, 10-15 to 10-17 ●
Nüesch Frank/Y. S. Ko/D. Damjanovic/D. M. Opris An All-Organic Elastomeric Electret Composite. Smart Nanomaterials 2018, Paris, FR, 12-10 to 12-13 ●
Opris Dorina/F. Nüesch/Y. Sheima/S. J. Dünki/P. Caspari/Y. S. Ko/E. Perju Dielectric elastomers put to work. EuroEAP 2018, Lyon, FR, 06-05 to 06-06 ●
Opris Dorina/S.J. Dünki/Y. S. Ko/E. Perju/P. Caspari/D. Damjanovic/Y. Sheima/F.A. Nüesch Thin Functional Dielectric Elastomers for Stretchable Devices. CIMTEC 2018, Perugia, IT, 06-11 to 06-15 ●
Quinsaat Jose/Dorina Opris/Frank Nüesch electrochemical cells. NANASMAT 2018, Gdansk, RU, 09-11 to 09-14 ●
Sheima Yauhen/Simon J. Dünki/Frank Nüesch/Dorina M. Opris Dielectric elastomer actuators operated below 300 V. EuroEAP 2018, Lyon, FR, 06-05 to 06-06 ◆
Strassel Karen/Adrian Kaiser/Sandra Jenatsch/Frank Nüesch/Marco Cremona/Rian Aderne/Roland Hany Squaraine Dye for Transparent Infrared-to-Visible Upconversion Imaging Device. International Conference on Organic Electronics, Bordeaux, FR, 06-16 to 06-22 ◆
Verma Anand/Jakob Heier/Frank Nüesch/D. Martenau/Toby Meyer Fully slot die coated efficient perovskite solar cells. PSCO 2019, Lausanne, 10-30 to 11-02 ◆
Verma Anand/Jakob Heier/Frank Nüesch/D. Martenau/Toby Meyer Peroprint-Printing perovskite solar cells. Swiss PV Tagung, Bern, 04-19 to 04-20 ◆
Bruinink Arie/Hahn David/Grün Nicole G./Weinberg/Annelie-Martina/Schmutz Patrik New In Vitro Set-Up to evaluate the Corrosion. Mechanisms of Biodegradable Metals. 10th Biometal, Symposium on Biodegradable Metals for Biomedical Applications, Oxford, GB, 08-26 to 08-31 ◆
Cancellieri Claudia/Druzhinin Aleksandr/Ariosa D./Araullo-Peters Vicente/Klyatskina Elizaveta/Chiodi Mirco/Siol Sebastian/Janczak-Rusch Jolanta/Jeurgens Lars P.H. Disorder, phase stability and stress evolution of nano-multilayered coatings upon thermal treatment. 4 th International Conference on Nanojoining and Microjoining 2018 (NMJ2018), Nara, JP, 12-02 to 12-05 ●
Cancellieri Claudia/Sebastian Siol/González-Castaño Mirian/Ott Noémie/Döbeli M./Unutulmazsoy Yeliz/Schmutz Patrik/Jeurgens Lars P.H. Oxidation behavior and self-passivation of WxTi1-xO _n alloys. 25 th workshop on oxide electronics (iWOE25), Les Diablerets, 10-01 to 10-03 ◆
Cancellieri Claudia/Druzhinin Aleksandr/Siol Sebastian/Janczak-Rusch Jolanta/Jeurgens L.P.H. Phase stability and stress evolution of nano-multilayered coatings upon thermal treatment. European Conference on Residual Stresses (ECRS) 2018, Leuven, BE, 09-10 to 09-15 ●
Dörner Lars Sol-gel synthesis of porous CuO nanoparticle-aggregates for reactive joining applications. PhD-Symposium, Empa Dübendorf, 11-26 ◆
Dörner Lars/Cancellieri Claudia/Schmutz Patrik/Kovalenko, Maksym V./Jeurgens Lars P.H Chemical synthesis of CuO nanoparticles for reactive joining using Al/CuO thermite coatings. Swiss Nanoconvention, ETH Zürich, 06-06 to 06-07 ◆
Dörner Lars/Schmutz Patrik/Jeurgens Lars P.H./Kovalenko Maksym V. Controlled synthesis and dispersion stability of submicron-sized CuO nanoparticle aggregates. Spring Meeting EMRS, Strasbourg, FR, 06-18 to 09-22 ●
Dörner Lars/Rheingans Bastian/Schmutz Patrik/Janczak-Rusch Jolanta/Kovalenko Maksym V./Jeurgens Lars P.H. Reactive nanojoining technologies. External Peer Review Empa, Dübendorf, 10-22 to 10-24 ◆

Dörner Lars/Cancellieri Claudia/Schmutz Patrik/Kägi Ralf/Walter Marc/Kovalenko Maksym/Janczak-Rusch Jolanta/Jeurgens Lars P.H.

Highly-energetic Al/CuO thermites through nanoparticle composites for reactive joining applications. 4th International Conference on Nanoinforming and Microjoining 2018 (NMJ2018), Nara, JP, 12-02 to 09-05 🍷

Faller Markus

Verhalten von verzinktem Stahl in Geflügelmastställen – Schadensuntersuchung, Korrosionsbelastung und konstruktive Details. Arbeitskreis Korrosion im Bauwesen zusammen mit Arbeitskreis Zink der GfKORR, Duisburg, DE, 10-11 🍷 ○

Faller Markus/Hans Ulrik

Atmosphärische Korrosion im Bauwesen – das ICP Materials Programm. 3-Länder-Korrosionstagung, Empa Dübendorf, 04-12 to 04-13 🍷 ○

González-Castaño Mirian/Döbeli Max/Jeurgens Lars P.H./Schmutz Patrik/Cancellieri Claudia

Electronic/electrochemical properties and corrosion susceptibility of amorphous anodic barrier Al₂O₃ grown on different substrate purities. 69th Annual Meeting of the International Society of Electrochemistry (ISE), Bologna, IT, 09-02 to 09-07 🍷

González-Castaño Miriam/Döbeli Max/Jeurgens Lars P.H./Schmutz Patrik/Cancellieri Claudia

Electronic/electrochemical properties and corrosion susceptibility of amorphous anodic barrier Al₂O₃ grown on different substrate purities. 69th Annual Meeting of the International Society of Electrochemistry (ISE), Bologna, IT, 09-02 to 10-07 🍷

Hauert Roland

Implantbeschichtungen und mögliche Versagensmechanismen. Generalversammlung der SGO Sektion Deutschschweiz an der Empa Akademie, Dübendorf, 01-31 🍷

Hauert Roland/Hauert Roland/Ilic Emilija/Pardo Ainhoa/Schmutz Patrik/Thorwarth Kerstin/Affolter Christian/Müller U./Falub C.V/Suter Thomas/Mischler S.

Accelerated tests for coating adhesion lifetime estimation in body fluid. EUROCORR 2018, Krakau, PL, 09-13 🍷

Hauert Roland/Hauert Roland/Ilic Emilija/Pardo Ainhoa/Schmutz Patrik/Thorwarth Kerstin/Affolter Christian,Müller U./Falub C.V. Suter Thomas/Mischler S.

Accelerated tests for coating adhesion lifetime estimation in body fluid. SGO-SST Technische Fachtagung 2018 mit fachbegleitender Ausstellung, Biel, 05-24 🍷 ○

Hauert Roland/Hauert Roland/Ilic Emilija/Pardo Ainhoa/Schmutz Patrik/Thorwarth Kerstin/Affolter Christian/Müller U./Falub C.V/Suter Thomas/Mischler S.

Corrosion at buried interfaces and interlayers in body fluid. SGO Generalversammlung, Empa Dübendorf, 01-31 🍷

Hauert Roland/Ilic Emilija/Pardo Ainhoa/Schmutz Parrik/Thorwarth Kerstin/Affolter Christian/Müller U. Falub C.V./Suter Thomas/Mischler Stefano

Accelerated tests for coating adhesion lifetime estimation in body fluid. [Meet the Expert] Implants – Materials & Surface Technologies for Implants, Olten, 03-13 🍷

Ilic Emilija/Pardo Ainhoa1/Hauert Roland/Schmutz Patrik/Mischler Stefano

Lifetime estimation of coated articulating implants: accelerated testing to address crevice, stress and fatigue related corrosion. [Meet the Expert] Implants – Materials & Surface Technologies for Implants, Olten, 03-13 ◆

Ilic Emilija/Pardo Ainhoa/Hauert Roland/Schmutz Patrik/Mischler Stefano

Interface Reactivity and Engineering of Coated Implants. External Peer Review Empa, Dübendorf, 10-22 to 10-24 ◆

Ilic Emilija/Hauert Roland/Pardo Ainhoa/Schmutz Patrik/Mischler Stefano

Crevice Corrosion Investigations of Silicon in Simulated Body Fluid Conditions. Annual Congress of the European Federation of Corrosion (Eurocorr) 2018, Krakau, PL, 09-09 to 09-13 🍷

Ilic Emilija

Empa Kinder Camp, Dübendorf, 07-15 to 07-22 ■

Janczak-Rusch Jolanta

Session Chair. 14th International Conference on Diffusion in Solids and Liquids (DSL 2018), Amsterdam, NL, 06-25 to 06-29 ▲

Janczak-Rusch Jolanta

Symposium Co-Organiser. Exmonan Symposium on Experimental investigation and modelling of nanoscale solid state reactions with high technological impact, 14th International Conference on Diffusion in Solids and Liquids (DSL2, Amsterdam, NL, 06-25 to 06-29 ■

Janczak-Rusch Jolanta

Welcome at Symposium CD. Joining of Inorganic Materials: From Macro- to Nano-length Scales. 14th Ceramics Congress (CIMTEC 2018) Symposium Organizer (Convener), Perugia, IT, 06-04 to 06-14 ■ ○

Janczak-Rusch Jolanta

73rd World Foundry Congress (73WFC), Session: TECHNOLOGY 6t, Krakau, PL, 09-23 to 09-27 ▲ ○

Janczak-Rusch Jolanta

Conference Co-Chair, 4th International Conference on Nanoinforming and Microjoining (NMJ2018), Nara, JP, 12-02 to 12-05 ▲ ○

Janczak-Rusch Jolanta

14th Ceramics Congress (CIMTEC 2018) Session Chair at Symposium "Joining of Inorganic Materials: From Macro- to Nano-length Scales", Perugia, IT, 06-04 to 06-14 ▲ ○

<p>Janczak-Rusch Jolanta/Chiodi Mirco/Araullo-Peters Vicente/Cancellieri Claudia/Jeurgens Lars P.H. Development of Nanostructured Joining Materials. 14th Ceramics Congress (CIMTEC 2018), Perugia, IT, 06-04 to 06-14 🍷 ○</p>
<p>Janczak-Rusch Jolanta/Chiodi Mirco/Cancellieri Claudia/Araullo-Peters Vicente/Klyatskina Elizaveta/Straumal Boris/Jeurgens Lars P.H. Fast diffusion in nanostructured materials: new opportunities for joining technologies? 14th International Conference on Diffusion in Solids and Liquids (DSL2018), Amsterdam, NL, 06-25 to 06-29 🍷 ○</p>
<p>Janczak-Rusch Jolanta/Chiodi Mirco/Cancellieri Claudia/Araullo-Peters Vicente/Klyatskina Elizaveta/Straumal Boris/Jeurgens Lars P.H. Fast diffusion in nanostructured materials: new opportunities for joining technologies? EXMONAN final meeting at DSL2018, Amsterdam, NL, 06-25 to 06-29 🍷</p>
<p>Janczak-Rusch Jolanta/Gusak A./Bezpalchuk V./Zaporozhets T./Pasichnyy M./Janczak-Rusch J./Erdelyi Z./Kozubski R. Models of flux-driven nucleation, ordering, voiding and cellular decomposition. 14th International Conference on Diffusion in Solids and Liquids (DSL2018), Amsterdam, NL, 06-25 to 06-29 🍷 ○</p>
<p>Janczak-Rusch Jolanta/Klyatskina Elizaveta/Cancellieri Claudia/Chiodi Mirco/Jeurgens Lars P.H./Straumal Boris/Janczak Jolanta Structure and properties of Ag/Ge/AlN Nano-multilayer system. 14th International Conference on Diffusion in Solids and Liquids (DSL2018) 28.06.2018, Amsterdam, The Netherlands, Amsterdam, NL, 06-25 to 06-29 🍷 ○</p>
<p>Janczak-Rusch Jolanta/Lipecka J./Janczak-Rusch J./Lewandowska M./Andrzejczuk M./Richter G./Jeurgens L.P.H. Co-Author, Presenter J. Lipecka: Enhanced mass transport in Al-Si/AlN nanomultilayer system. E-MRS 2018 Spring Meeting, Strasbourg, FR, 06-18 to 06-20 🍷</p>
<p>Janczak-Rusch Jolanta/Lipecka J./Janczak-Rusch J./Lewandowska M./Andrzejczuk M./Richter G./Jeurgens L.P.H. Co-author, presenter J. Lipecka: Melting behaviour of the nanostructured Al-Si50at%/AlN system. 4th International Conference on Nanoinforming and Microjoining 2018 (NMJ2018), Nara, JP, 12-02 to 12-05 🍷</p>
<p>Janczak-Rusch Jolanta/Lipecka J./Lewandowska M./Janczak-Rusch J./Richter G./Jeurgens L.P.H. Co-author, presenter M. Lewandowska: Microstructural changes and melting behaviour of Al-Si/AlN nanomultilayer systems with different Si concentrations. ICPMAT2018, Hanoi, VN, 09-04 to 09-07 🍷</p>
<p>Janczak-Rusch Jolanta/Lipecka Joanna/Janczak-Rusch Jolanta/Lewandowska M./Andrzejczuk M./Richter G./Jeurgens Lars P.H. Melting behaviour of the nanostructured Al-Si50at%/AlN system. 4th International Conference on Nanoinforming and Microjoining 2018 (NMJ2018), Nara, JP, 12-02 to 12-05 🍷 ○</p>
<p>Janczak-Rusch Jolanta/Rheingans Bastian/Cancellieri Claudia/Chiodi Mirco/Araullo-Peters Vicente/Jeurgens Lars P.H. Nanomultilayers for joining applications. 73rd World Foundry Congress (73WFC) Creative Foundry, Krakau, PL, 09-23 to 09-27 🍷</p>
<p>Jeurgens Lars P.H./Rheingans Bastian/Chiodi Mirco/Araullo-Peters Vicente/Cancellieri Claudia/Janczak-Rusch Jolanta Interface Engineering of Nanostructured Joining Materials. CIMTEC 2018, 14th International Ceramics Congress, Symp. 'Joining of Inorganic Materials: From Macro- to Nano-length Scales', Session 'Nano-scale Interface of Dissimilar Materials', Perugia, IT, 06-05 🍷 ○</p>
<p>Jeurgens Lars Interfacial design of hybrid nanomaterials for advanced joining technologies. Nanoscience Colloquium, University of Hamburg, Center for Hybrid Nanostructures (CHyN), Institute for Nanostructures and Solid State Physics, Hamburg, DE, 05-08 🍷 ○</p>
<p>Jeurgens Lars P.H. Interfacial Design of Nanostructured Materials for Emerging Nano-Joining technologies. External Peer Review Empa, Dübendorf, 10-22 to 10-24 🍷</p>
<p>Jeurgens Lars P.H. 14th Ceramics Congress (CIMTEC 2018) Session Chair at Symposium "Joining of Inorganic Materials: From Macro- to Nano-length Scales", Perugia, IT, 06-04 to 06-14 ▲</p>
<p>Jeurgens Lars P.H./Araullo-Peters Vicente/Cancellieri Claudia/Chiodi Mirco/Janczak-Rusch Jolanta/ Directing mass transport of nano-confined alloys upon heating: application to Ag-Cu/AlN nanomultilayers. 14th International Conference on Diffusion in Solids and Liquids (DSL2018), Amsterdam, NL, 06-25 to 06-29 🍷 ○</p>
<p>Jeurgens Lars/Lipecka J./Janczak-Rusch J./Lewandowska M./Andrzejczuk M./Richter G./Jeurgens L.P.H. Co-author, presenter J. Lipecka: Enhanced mass transport in Al-Si/AlN nanomultilayer system." E-MRS 2018 Spring Meeting, Strasbourg, FR, 06-18 to 06-20 🍷</p>
<p>Jeurgens Lars P.H./Lipecka J./Janczak-Rusch J./Lewandowska M./Andrzejczuk M./Richter G./Jeurgens L.P.H., Co-author, presenter J. Lipecka: Melting behaviour of the nanostructured Al-Si50at%/AlN system. 4th International Conference on Nanoinforming and Microjoining 2018 (NMJ2018), Nara, JP, 12-02 to 12-05 🍷</p>

<p>Jeurgens Lars P.H./Lipecka J./Lewandowska M./Janczak-Rusch J./Richter G./Jeurgens L.P.H. Co-author, presenter M. Lewandowska: Microstructural changes and melting behaviour of Al-Si/AlN nanomulti-layer systems with different Si concentrations. ICPMAT2018, Hanoi, VN, 09-04 to 09-07 🍷</p>
<p>Lin Luchan/Janczak-Rusch Jolanta/Jeurgens Lars P.H. Directed mass transportation in confined nanolayer structures for nanojoining technologies. EMPA Postdocs-II & PSI-Fellow II-3i retreat 2018, Empa Dübendorf, 09-21 🍷</p>
<p>Lin Luchan/Chiodi Mirco/Janczak-Rusch Jolanta/Jeurgens Lars P.H./ Controlled directional mass transportation in metal nanolayer confined structures for devices integration. International Conference on Nanojoining and Microjoining 2018 (NMJ2018), Nara, JP, 12-02 to 12-05 🍷</p>
<p>Lin Luchan/Cancellieri Claudia/Siol Sebastian/Janczak-Rusch Jolanta/Jeurgens Lars P.H. Tailoring fast, directional mass transport of nano-confined metals. External Peer Review Empa, Dübendorf, 10-22 to 10-24 🍷</p>
<p>Ott Noémie/Suter Thomas A./Schmutz Patrik/Jeurgens Lars P.H. Local electrochemical assessment of corrosion resistance on complex shaped metallic components. SWII 2018 – Additive Manufacturing & Lightweight Technologies 2018, Empa Dübendorf, 09-25 🍷</p>
<p>Ott Noémie/Suther Thomas/Schmutz Patrik/Jeurgens Lars P.H. Local electrochemical assessment of metallic materials degradation mechanisms. External Peer Review at Empa, Dübendorf, 10-22 to 10-24 🍷</p>
<p>Ott Noémie/Suter Thomas/Biribilis Nick/Schmutz Patrik Local electrochemical characterisation of surface reactivity on multiphase alloys. 69th Annual Meeting of the International Society of Electrochemistry, Bologna, IT, 09-02 to 09-07 🍷</p>
<p>Ott Noémie/Schmutz Patrik Towards a better mechanistic understanding of Cu-Zn alloy corrosion behavior in presence of ammonia derivatives. 69th Annual Meeting of the International Society of Electrochemistry (ISE), Bologna, IT, 09-02 to 09-07 🍷</p>
<p>Pardo Ainhoa Towards a realistic lifetime prediction of DLC coated articulating implants. Swiss Tribology Technical Meeting 2018, Empa Dübendorf, 11-16 🍷 ○</p>
<p>Pardo Ainhoa/Ilic E./Thorwarth K./Stiefel M./Schmutz P./Hauert R. Interface corrosion and fatigue mechanism investigations in DLC coated articulating implants. 5th International Workshop – Plasma Science & Interfaces 2018, Empa St. Gallen, 10-18 to 10-19 🍷</p>
<p>Pardo Ainhoa/Schmutz Patrik/Hauert Roland Realistic lifetime estimation of protective DLC coatings for articulating biomedical implants: combined dynamic and corrosion wear tests. European conference in Nanofilms 2018 (ECNF), Cranfield, GB, 03-20 to 03-22 🍷</p>
<p>Rheingans Bastian/Rheingans B./Elsener H.R./Burgdorf T./Janczak-Rusch J./Jeurgens L.P.H. Advanced Joining Technologies. SWII 2018 "Additive Manufacturing & Lightweight Technologies", Empa Dübendorf, 09-25 🍷</p>
<p>Rheingans Bastian/Janczak-Rusch J. Rheingans B./Elsener H.R./Jeurgens L.P.H. Fügetechnologie. 10. Innovationsforum "Smarte Technologien & Systeme", Donaueschingen, DE, 03-15 🍷</p>
<p>Rheingans Bastian/Janczak-Rusch J./Rheingans B./Chiodi M./Cancellieri C./Arallo-Peters V./Jeurgens L.P.H. Nano-multilayers for advanced joining applications. Empa Technology Briefing "Nano- und mikrostrukturierte Beschichtungen und Oberflächen: Grosse Wirkung mit wenig Material", Empa Dübendorf, 01-24 🍷</p>
<p>Rheingans Bastian/Spies Irina/Schumacher Axel/Knappmann Stephan/Rheingans Bastian/Janczak-Rusch Jolanta/Jeurgens Lars Presenter Irina Spies: Schonendes reaktives Fügen von Mikrosystemen. 10. Innovationsforum "Smarte Technologien & Systeme", Donaueschingen, DE, 03-15 🍷</p>
<p>Rheingans Bastian/Knappmann Stephan/Spies Irina/Schumacher Axel/Rheingans Bastian/Janczak-Rusch Jolanta/Jeurgens Lars P.H. Presenter St. Knappmann: Reactive joining of sensitive materials for MEMS devices: characterization of joint quality. Smart systems integration conference, Dresden, DE, 04-11 🍷</p>
<p>Rheingans Bastian/Cancellieri Claudia/Chiodi Mirco/Janczak-Rusch Jolanta/Jeurgens Lars P.H. Microstructural design of nano-multilayers for advanced joining applications. Swiss Nanoconvention, ETH Zürich, 06-06 to 06-07 🍷</p>
<p>Rheingans Bastian/Janczak-Rusch Jolanta/Jeurgens Lars P.H. Reactive nano-multilayers for joining. 4th International Conference on Nanojoining and Microjoining 2018 (NMJ2018), Nara, JP, 12-02 to 12-05 🍷</p>
<p>Schmutz Patrik Aspekte der Korrosionsforschung an der Empa. Generalversammlung der SGO Sektion Deutschschweiz an der Empa Akademie, Dübendorf, 01-31 🍷</p>
<p>Schmutz Patrik Influence and characterization of Stainless Steel passivation. Swiss Technical Meetings – Borer Academy (Invited talk- German symposium), Zuchwil, 10-16 🍷 ○</p>

Schmutz Patrik	Influence and characterization of Stainless Steel passivation. Swiss Technical Meetings – Borer Academy – (Invited talk- French Symposium), Crissier, 11-14 🍷 ○
Schmutz Patrik	Barrier anodic amorphous oxide growth: defect structure and related properties. 27 th Annual Anodizing Conference, Minneapolis, Minnesota, US, 10-02 to 10-04 🍷 ○
Siol Sebastian	Design of novel, metastable semiconductor alloys. 21 st International Conference on Ternary and Multinary Compounds, Boulder Colorado, US, 09-09 to 09-13 🍷 ○
Siol Sebastian	Session Chair "Metastable Materials." 21 st International Conference on Ternary and Multinary Compounds, Boulder Colorado, US, 09-09 to 09-13 ▲
Siol Sebastian/González-Castaño Mirian/Ott Noémie/Araullo Peters Vicente/Unutulmazsoy Yeliz/Schmutz Patrik/Jeurgens Lars P.H./Cancellieri Claudia	Oxidation behavior and self-passivation of WxTi1-xO _n alloys. European Materials Research Society (EMRS) Spring Meeting, Strasbourg, FR, 06-18 to 06-22 🍷
Siol Sebastian/González-Castaño Mirian/Ott Noémie/Beall Casey/Doebeli Max/Schmutz Patrik/Jeurgens Lars P.H./Cancellieri Claudia	Properties and long-term stability of functional oxide films. External Peer Review Empa, Dübendorf, 10-22 to 10-24 ♦
Siol Sebastian/Hellmann J. C./Tilley S. D./Graetzel M./Morasch J./Deuermeier J./Jaegermann W./Klein A.	Band Alignment Engineering at the Cu ₂ O/ZnO Heterointerface using in-situ Photoelectron Spectroscopy. European Materials Research Society (EMRS) Spring Meeting, Strasbourg, FR, 06-18 to 06-22 ♦
Suter Thomas/Hans Ulrik	Wasserstoffinduzierte Spannungsrisskorrosion an hochfesten Stählen, Schäden und deren Untersuchung. 3-Länder-Korrosionstagung, Empa Dübendorf, 04-12 to 04-13 🍷 ○
Tuchschnid Martin	Korrosionsbeanspruchung und -schädigung von sicherheitsrelevanten metallischen Bauteilen in Strassentunneln. 3-Länder-Korrosionstagung, Empa Dübendorf, 04-12 to 04-13 🍷
Tuchschnid Martin/Steiger Adrian	64 Historical Trombones – Material Analysis. The Sound of Brass Fifth International Romantic Brass Symposium, Biel, 11-20 to 11-22 🍷
Unutulmazsoy Yeliz/Cancellieri Claudia/Jeurgens Lars P.H.	In-situ Oxidation Studies of Cu Thin Films: Growth Kinetics and Oxide Phase Evolution. EMRS Fall Meeting 2018, Symposium\Session Nanomaterials\Electronics and Photonics, Warsaw, PL, 09-19 🍷
Unutulmazsoy Yeliz/Cancellieri Claudia/Jeurgens Lars P.H.	Oxidation Kinetics of Thin Cu Films by In-situ Resistance Measurements and Oxide Phase Evolution. Swiss Nano-convention, ETH Zürich, 06-06 to 06-07 ♦
Ast Johannes/Kalacska Szilvia/Schwiedrzik Jakob/Michler Johann/Maeder Xavier	In-situ deformation and fracture experiments at variable temperatures in the SEM. MPIE Seminar, Düsseldorf, DE, 08-23 🍷
Ast Johannes/Schwiedrzik Jakob/Petho Laszlo/Maeder Xavier/Michler Johann	Investigation of the microscale fracture behaviour of GaAs single crystals for mode I, II and III loading. Gordon Research Conference: Thin Film and Small Scale Mechanical Behavior, Lewiston, US, 07-15 to 07-20 ♦
Ast Johannes/Schwiedrzik Jakob/Wehrs Juri/Michler Johann/Maeder Xavier	The brittle-ductile transition of tungsten single crystals at the micro-scale. Nanobrücken 2018, Erlangen, DE, 02-20 to 02-22 🍷
Ast Johannes/Schwiedrzik Jakob/Wehrs Juri/Michler Johann/Maeder Xavier	The brittle-ductile transition of tungsten single crystals at the micro-scale. DPG and EPS Spring Meeting 2018, Berlin, DE, 03-11 to 03-16 🍷
Ast Johannes/Schwiedrzik Jakob/Wehrs Juri/Michler Johann/Maeder Xavier	The brittle-ductile transition of tungsten single crystals at the micro-scale. ESMC 2018, Bologna, IT, 07-02 to 07-06 🍷 ○
Ast Johannes/Kalácska Szilvia/Schwiedrzik Jakob/Polyakov Mikhail/Michler Johann/Maeder Xavier	The use of (3D) HR-EBS to investigate the brittle to ductile transition in single crystal tungsten. Gordon Research Conference: Thin Film and Small Scale Mechanical Behavior, Lewiston, US, 07-15 to 07-20 ♦
Berger Luisa/Jurczyk Jakub/Madajska Katarzyna/Rodrigues Vaz Alfredo/Höflich Katja/Szymńska Iwona/Moshkalev Stanislav/Hoffmann Patrik/Utke Ivo	3D Printing by Focused Electron Beam Induced Deposition – Direct-Write Fabrication and Purification of Nanostructures. XVII BRazil MRS Meeting 2018, Natal, BR, 09-16 to 09-20 🍷
Berger Luisa/Madajska Katarzyna/Boysen Niels/Szymńska Iwona/Devi Anjana/Höflich Katja/Hoffmann Patrik/Utke Ivo	Exploring new Copper Complexes for FEBID. DPG Frühjahrstagung, Berlin, DE, 03-15 to 03-18 🍷

<p>Berger Luisa/Madajska Katarzyna/Szymńska Iwona/Hoffmann Patrik/Utke Ivo Exploring new Copper Complexes for FEBID. FEBIP 2018, Modena, IT, 07-10 to 07-13 🍷</p> <p>Bertero Enrico Gateway to industry: from materials to devices. Practical aspects. Job interview: Applications Scientist. SELECTA Winter School – University of Cambridge, Cambridge, GB, 01-07 to 01-12 🍷</p>
<p>Bertero Enrico/Hasegawa Madoka/Pellicer Eva/Sort Jordi/Hermann Inge K./Mischler Stefano/Michler Johann/Philippe Laetitia Soft-magnetic electrodeposited FeCrNi stainless steel-like films with high corrosion resistance and low cytotoxicity. MRS 2018 Spring Meeting, Strasbourg, FR, 06-18 to 06-22 🍷</p>
<p>Bertero Enrico/Hasegawa Madoka/Sort Jordi/Pellicer Eva/Hermann Inge Katrin/Doebeli Max/Cesiulis Henrikas/Asadauskas Svajus/Tsyntaru Natalia/Mischler Stefano/Michler Johann/Philippe Laetitia Electrodeposited amorphous-like and austenitic stainless steel: Synthesis, miniaturisation and physical properties. SELECTA – Final meeting, Barcelona, ES, 08-26 to 08-29 🍷</p>
<p>Bertero Enrico/Hasegawa Madoka/Vicente Cristina V./Pellicer Eva/Sort Jordi Electrodeposited FeCrNi stainless steel-like films: influence of impurities and microstructure on corrosion resistance. EUROCORR 2018, Krakow, PL, 09-09 to 09-13 🍷</p>
<p>Casari Daniele/Taylor Aidan/Wolfram Uwe/Zysset Philippe/Michler Johann/Schwiedrzik Jakob Nanoscale compressive deformation mechanisms and yield properties of hydrated bone extracellular matrix. Anton Paar TriTec Users Meeting, Morges, 01-31 to 02-01 🍷 ○</p>
<p>Casari Daniele/Pethö Laszlo/Schürch Patrik/Philippe Laetitia/Michler Johann/Zysset Philippe/Schwiedrzik Jakob Design and Validation of a Testing Setup to Measure Tensile Properties of Materials at the Microscale. EUFN Workshop 2018, Grenoble, FR, 06-19 to 06-20 🍷</p>
<p>Casari Daniele/Pethö Laszlo/Schürch Patrik/Brönnimann Rolf/Philippe Laetitia/Michler Johann/Zysset Philippe/Schwiedrzik Jakob Tensile properties of bone extracellular matrix at the microscale. WCB 2018, Dublin, IE, 07-08 to 07-12 🍷</p>
<p>Edwards Thomas/Di Gioacchino Fabio/Clegg William/Wehrs Juri/Mohanty Gaurav/Michler Johann Analysis of longitudinal twinning in γ-TiAl by microcompression up to 700 °C with strain and crystal orientation mapping. Gordon Research Conference: Thin Film and Small Scale Mechanical Behavior, Lewiston, US, 07-15 to 07-20 🍷</p>
<p>Edwards Thomas/Di Gioacchino Fabio/Goodfellow Amy/Clegg William/Wehrs Juri/Mohanty Gaurav/Michler Johann Deformation of lamellar γ-TiAl below the general yield stress. Indentation 2018, Liège, BE, 09-11 to 09-14 🍷</p>
<p>Edwards Thomas/Di Gioacchino Fabio/Jones Robert/Clegg William/Wehrs Juri/Mohanty Gaurav/Michler Johann Mapping Strains at High Temperature on Micromechanical Testpieces. GDRi Mecano, Cargèse, FR, 10-28 to 11-02 🍷</p>
<p>Guerra Carlos/Savu Raluca/Li Meng/Moshkalev Stanislav/Michler Johann/Park Hyung Gyu/Utke Ivo The progressive sp² -to-sp³ transition in Single-walled Carbon Nanotubes during Atomic Layer Deposition using in-situ Raman spectroscopy. Brazil Materials Research Society Meeting, Natal, BR, 09-16 to 09-20 🍷</p>
<p>Jakub Jurczyk/Brewer Christopher/Hawkins Olivia/Polyakov Mikhail/Kapusta Czeslaw/McElwee-White Lisa/Utke Ivo Focused Electron Beam Induced Deposition and purification of Ru using halogenated organometallic compounds. FEBIP 2018, Modena, IT, 07-10 to 07-13 🍷</p>
<p>Jakub Jurczyk/Brewer Christopher/Hawkins Olivia/Polyakov Mikhail/Kapusta Czeslaw/McElwee-White Lisa/Utke Ivo Focused Electron Beam Induced Deposition with halogenated organometallic Ru compounds. DPG Frühjahrstagung, Berlin, DE, 03-15 to 03-18 🍷</p>
<p>Jurczyk Jakob /Brewer Christopher/Hawkins Olivia/Polyakov Mikhail/Kapusta Czeslaw/McElwee-White Lisa/Utke Ivo Purification of Ru structures created by Focused Electron Beam Induced Deposition. 1st ELENA Conference and Mid-term Meeting, Warsaw, PL, 09-29 to 10-02 🍷</p>
<p>Kalacska Szilvia Introduction to HR-EBSD and its applications. EBSD Pre-congress Workshop (WS5 EBSD thread), Sydney, AU, 09-08 🍷 ○</p>
<p>Kalacska Szilvia/Ast Johannes/Michler Johann/Maeder Xavier 3D HR-EBSD Examination of Deformed W Micro-cantilevers. EUFN Workshop 2018, Grenoble, FR, 06-19 to 06-20 🍷</p>
<p>Kalacska Szilvia/Groma Istvan/Dankhazi Zoltan/Dusan Ispanovity Peter/Ast Johannes/Michler Johann/Maeder Xavier Examination of 3D strain evolution in deformed micropillars and micro-cantilevers by HR-EBSD. EBSD 2018, Plymouth, GB, 04-09 to 04-11 🍷</p>

<p>Kalacska Szilvia/Groma Istvan/Dankhazi Zoltan/Ispanovity Peter D./Ast Johannes/Michler Johann/Maeder Xavier Examination of 3D strain evolution in deformed micropillars and micro-cantilevers by HR-EBSD. RMS EBSD 2018, Plymouth, GB, 04-10 to 04-12 🍷</p>
<p>Kalacska Szilvia/Groma Istvan/Ispanovity Peter D./Dankhazi Zoltan/Maeder Xavier/Michler Johann Examination of strain evolution in deformed micropillars by HR-EBSD. 19th International Microscopy Congress (IMC 2018), Sydney, AU, 09-09 to 09-14 🍷</p>
<p>Maeder Xavier Werkstoffanalytik für Beschichtungen und 3D Druck. Technology Briefing: Innovative, funktionelle Beschichtungen, Thun, 11-14 🍷 ○</p>
<p>Maeder Xavier/Ast Johannes/Kalácska Szilvia/Priebe Agnieszka/Michler Johann Recent advances in FIB-SEM techniques for elemental, strain, stress and defect analyses combined with micro-mechanical testing. 19th International Microscopy Congress (IMC19), Sydney, AU, 09-09 to 09-14 🍷 ○</p>
<p>Maeder Xavier/Ast Johannes/Schwiedrzik Jakob/Wehrs Juri/Michler Johann Study of the brittle-ductile transition in single crystal tungsten at the micro-scale by insitu HR-EBSD. RMS EBSD 2018, Plymouth, GB, 04-10 to 04-11 🍷</p>
<p>Maeder Xavier/Ast Johannes/Döbeli Max/von Allmen Kim/Neels Antonia/Dommann Alex/Rudigier Helmut/Widrig Beno/Ramm Jürgen Synthesis and characterization of combined oxides and Ni superalloy coatings by cathodic arc evaporation for bond coat application. ICMCTF 2018, San Diego, US, 04-22 to 04-27 🍷</p>
<p>Maeder Xavier/Ast Johannes/Schwiedrzik Jakob/Wehrs Juri/Michler Johann Temperature and Loading Rate Influence in Micro-Scale Fracture Experiments. ICMCTF 2018, San Diego, US, 04-22 to 04-27 🍷</p>
<p>Michler Johann Mechanical properties of materials at small length scales. 45^{ème} séminaire INFOMAT, Neuenburg, 11-08 🍷</p>
<p>Michler Johann Propriétés mécaniques des microcomposants: des pièces de montre LIGA aux métamatériaux imprimés en 3D. Swiss MNT Network – Trends in Micro Nano, Lausanne, 12-12 🍷</p>
<p>Michler Johann In situ observation of nanomechanical testing under extreme conditions: extreme temperatures, high strain rates, high cycle fatigue. JIFT – The 30th International Francophone Days of Tribology, Sophia Antipolis, FR, 05-16 to 05-18 🍷 ○</p>
<p>Michler Johann Insights from Variable Temperature and Ultra-high Strain Rate Nanomechanical Testing of Model Nanocrystalline and Nanocomposite Materials Realized by Either Inert Gas Condensation or Alternating Atomi. TMS2018, Phoenix, US, 03-11 to 03-15 🍷 ○</p>
<p>Michler Johann Mechanical Properties of Materials and Devices at the Microscale under Extreme Conditions of High and Low Temperatures and High Strain Rates. MSE2018, Darmstadt, DE, 09-26 to 09-28 🍷 ○</p>
<p>Michler Johann Mechanical Properties of Materials and Devices at the Microscale under Extreme Conditions of High and Low Temperatures and High Strain Rates. The symposium Indentation 2018, Liège, BE, 09-11 to 09-14 🍷 ○</p>
<p>Michler Johann Mechanical properties of model nanolaminate and nanocomposite films realized by alternating magnetron sputtering and inert gas condensation of nanoparticle. Nanobrücken 2018, Erlangen, DE, 02-20 to 02-22 🍷 ○</p>
<p>Petho Laszlo/Schürch Patrik/Mieszala Maxime/Schwiedrzik Jakob/Wheeler Jeffrey/Philippe Laetitia/Michler Johann Towards lightweight materials: Micromechanical test specimen preparation by 2D and 3D microfabrication techniques. Swiss Sweden Innovation Initiative Additive Manufacturing and Lightweight Technologies, Dübendorf, 09-25 🍷</p>
<p>Petho Laszlo/Polyakov Mikhail/Schoeppner Rachel/Thomas Keith/Könnyü Bence/Maeder Xavier/Michler Johann Increasing the thermal stability of thin films by incorporating co-sputtered nanoparticles. 16th International Conference on Plasma Surface Engineering, Garmisch-Partenkirchen, DE, 09-17 to 09-21 🍷</p>
<p>Petho Laszlo/Polyakov Mikhail/Schoeppner Rachel/Thomas Keith/Könnyü Bence/Maeder Xavier/Michler Johann Increasing the thermal stability of thin films by incorporating co-sputtered nanoparticles. 5th International Workshop – Plasma Science & Interfaces, St. Gallen, 10-18 to 10-19 🍷</p>
<p>Pethö Laszlo/Schoeppner Rachel/Taylor Aidan/Schwiedrzik Jakob/Mohanty Gaurav/Chawla Vipin/Thomas Keith/Könnyü Bence/Ipach Robin/Zechner Johannes/Guerra-Nuñez Carlos/Michler Johann Combinatorial deposition techniques enabling fundamental nanomechanic investigations. Nano- und mikrostrukturierte Beschichtungen und Oberflächen, Dübendorf, 01-24 🍷</p>

<p>Pethö Laszlo/Chen Ming/Lauener Carmen/Michler Johann/Wheeler Jeffrey In-situ Mechanical testing of Microfabricated micro/nanopillars. 19th CMi Annual Review Meeting, Lausanne, 05-08 ◆</p>
<p>Pethö Laszlo/Casari Daniele/Schürch Patrik/Michler Johann/Zysset Philippe/Schwiedrzik Jakob In-situ microtensile testing using custom fabricated silicon grippers. 19th CMi Annual Review Meeting, Lausanne, 05-08 ◆</p>
<p>Pethö Laszlo/Antonin Olivier/Schoeppner Rachel/Gabureac Mihai/Rats David/Nelis Thomas/Michler Johann Low temperature nano-crystalline diamond growth on high aspect ratio silicon structures. 19th CMi Annual Review Meeting, Lausanne, 05-08 ◆</p>
<p>Philippe Laetitia/Schmutz Patrik/Mischler Stefano Electrochemical Impedance Spectroscopy. Electrochemistry in Corrosion Research Workshop, Zofingen, 11-20 to 11-22 ■ ○</p>
<p>Pip Petai/Donnelly C./Heyderman L. J./Philippe L. Electroless Deposition of Magnetic Materials on 3D Nanostructures. MaP Graduate Symposium, ETH Zurich, 06-26 ◆</p>
<p>Pip Petai/Skjærvø S. H./Heyderman L. J./Philippe L. Triangular Ising-like Nanowire Lattice – Investigations on the evolution of the Domain-Wall Network and the Spin-Liquid Phase Transition by Geometric Distortion. 2nd NFFA-Europe Summer School – Nanoscience Foundries and Fine Analysis (NFFA), available instruments and techniques, Elettra Sincrotrone, Basovizza (Trieste), IT, 07-09 to 07-13 ◆</p>
<p>Polyakov Mikhail/Maeder Xavier/Schoeppner Rachel L./Michler Johann Transmission Kikuchi diffraction for thin film applications. TMS2018, Phoenix, US, 03-11 to 03-15 ●</p>
<p>Polyakov Mikhail/Schoeppner Rachel L./Petho Laszlo/Thomas Keith/Könnnyü Bence/Maeder Xavier/Michler Johann High-temperature stabilization of nanocrystalline Cu via direct in-corporation of W nanoparticles. TMS 2018, Phoenix, US, 03-11 to 03-15 ●</p>
<p>Priebe Agnieszka/Avancini Enrico/Sastre Pellicer Jordi/Bücheler Stephan/Michler Johann Application of FIB-TOF-SIMS technique for elemental characterization of new thin film energy devices. 2nd EuFN Workshop , Grenoble, FR, 06-19 to 06-20 ◆</p>
<p>Priebe Agnieszka/Pillatsch Lex/Scheer Jürgen A./Michler Johann Innovative methodology of increasing FIB-TOF-SIMS signals during elemental characterization in negative ion detection mode. 2nd EuFN Workshop, Grenoble, FR, 06-19 to 06-20 ●</p>
<p>Ramachandramoorthy Rajaprakash/Schwiedrzik Jakob/Pethö Laszlo/Frey Damian/Breguet Jean-Marc/Michler Johann Anomalous plasticity in amorphous silica micropillars tested at high strain rates. Gordon Research Conference: Thin Film and Small Scale Mechanical Behavior, Lewiston, US, 07-15 to 07-20 ◆</p>
<p>Ramachandramoorthy Rajaprakash/Mieszala Maxime/Schürch Patrik/Philippe Laetitia/Michler Johann Electrodeposition and mechanical testing of 3D microstructures. MSE2018, Darmstadt, DE, 09-26 to 09-28 ●</p>
<p>Ramachandramoorthy Rajaprakash/Schwiedrzik Jakob/Pethö Laszlo/Frey Damian/Breguet Jean-Marc/Michler Johann High strain rate compression testing of amorphous silica micropillars. MRS Fall Meeting, Boston, US, 11-25 to 11-30 ●</p>
<p>Ramachandramoorthy Rajaprakash/Mohanty Gaurav/Pethö Laszlo/Schwiedrzik Jakob/Frey Damian/Breguet Jean-Marc/Michler Johann High strain rate compression testing of micropillars. StrengthABLE Final project meeting, Torino, IT, 05-23 to 05-24 ●</p>
<p>Ramachandramoorthy Rajaprakash/Petho Laszlo/Michler Johann/Schwiedrzik Jakob/Mohanty Gaurav Dynamic compression testing of silicon micropillars. MSE2018, Darmstadt, DE, 09-26 to 09-28 ●</p>
<p>Ruoho Mikko/Tarasiuk Natalia/Rohbeck Nadia/Kapusta Czeslaw/Michler Johann/Utke Ivo Stability of mechanical properties of molecular layer deposited aluminum ethylene glycol. HERALD SUMMIT 2018, Braga, PT, 09-25 to 09-28 ◆</p>
<p>Schürch Patrik/Pethö Laszlo/Schwiedrzik Jakob/Michler Johann/Philippe Laetitia Additive manufacturing through galvanofarming of 3D nickel microcomponents: Simulation assisted synthesis. 13th International Workshop on Electrodeposited Nanostructures (EDNANO13), Bristol, GB, 08-30 to 09-01 ●</p>
<p>Schürch Patrik/Pethö Laszlo/Schwiedrzik Jakob/Michler Johann/Philippe Laetitia Electrodeposition of 3D Nickel Microcomponents: Simulation Assisted Synthesis. Comsol Conference , Lausanne, 10-22 to 10-24 ◆</p>
<p>Schürch Patrik/Ramachandramoorthy Rajaprakash/Pethö Laszlo/Schwiedrzik Jakob/Michler Johann/Philippe Laetitia Electrodeposition of 3D Nickel Microcomponents: Simulation Assisted Synthesis. Comsol Conference, Lausanne, 10-22 to 10-24 ●</p>

Schwiedrzik Jakob/Casari Daniele/Pethö Laszlo/Taylor Aidan/Wolfram Uwe/Philippe Zysset/Michler Johann

Anisotropic micromechanical properties and deformation mechanisms of bone extracellular matrix in tension and compression. Gordon Research Conference: Thin Film and Small Scale Mechanical Behavior, Lewiston, US, 07-15 to 07-19 ◆

Schwiedrzik Jakob/Taylor Aidan/Casari Daniele/Wolfram Uwe/Zysset/Philippe/Michler Johann

Nanoscale deformation mechanisms and yield properties of hydrated lamellar bone. World Congress of Biomechanics, Dublin, IE, 07-08 to 07-12 ●

Utke Ivo

Atomic and Molecular Layer Deposition: Shaping and functionalizing future materials. International Seminars of Physics Department at the Academic Centre for Materials and Nanotechnology, AGH University of Science and Technology Cracow, PL, 10-24 ●○

Utke Ivo/Schoeppner Rachel/Taylor Aidan/Michler Johann

ALD Al₂O₃ films: Investigation of Adhesion on Ternary Metal Alloys and Study of Dislocation Barrier Properties. CAMTEC IV Symposium on Fine-Scale Mechanical Characterisation and Behaviour, Cambridge University, GB, 04-09 to 04-10 ●○

Vicente Manzano Cristina/Ramos Daniel/Pethö Laszlo/Bürki Gerhard/Michler Johann/Philippe Laetitia

Controlling Colour and Effective Refractive Index of Metal-Anodic Aluminium Oxide-Al Nanostructures: Morphology of AAO. NanoSpain 2018, Bilbao, ES, 03-12 to 03-15 ●

Vicente Manzano Cristina/Best James. P/Schwiedrzik Jakob J./Cantarero Andrés/Ramos Daniel/Pethö Laszlo/Bürki Gerhard/Michler Johann/Philippe Laetitia

The Influence of morphological properties of self-ordered Anodic Aluminum Oxide (AAO) Films on the optical properties and effective refractive index and color observed on Metal-AAO-Al Nanostructures. EMRS, Strasbourg, FR, 06-18 to 06-22 ●

Borin Barin Gabriela/Overbeck Jan/El Abassi Maria/Braun Oliver/Perrin Mickael/Feng Xinliang/Müllen Klaus/Ruffieux Pascal/Calame Michel/Fasel Roman

Bottom-up fabrication of graphene nanoribbons: From molecules to devices. Marvel Review and Retreat 2018, EPFL Lausanne, 09-12 ◆

Borin Barin Gabriela/Llinas Juan Pablo/Paillet Matthieu/Liang Liangbo/Meunier Vincent/Feng Xinliang/Mullen Klaus/Bokor Jeffrey/Ruffieux Pascal/Fasel Roman

Bottom-up fabrication of graphene nanoribbons: From molecules to devices. SAOG, Fribourg, 02-01 ◆

Borin Barin Gabriela/Overbeck Jan/El Abassi Maria/Braun Oliver/Perrin Mickael/Feng Xinliang/Mullen Klaus/Ruffieux Pascal/Calame Michel/Fasel Roman

Bottom-up fabrication of graphene nanoribbons: From molecules to devices. SPS Annual Meeting 2018, Lausanne, 08-28 to 08-31 ◆

Borin Barin Gabriela/Llinas Juan Pablo/Liang Liangbo/El Abassi Maria/Overbeck Jan/Paillet Matthieu/Müllen Klaus/Calame Michel/Ruffieux Pascal/Meunier Vincent/Bokor Jeffrey/Fasel Roman

Bottom-up fabrication of graphene nanoribbons: From molecules to devices. Graphene 2018, Dresden, DE, 06-26 to 06-29 ●

Borin Barin Gabriela/Overbeck Jan/El Abassi Maria/Darawish Rimah/Sun Qiang/Feng Xinliang/Mullen Klaus/Calame Michel/Ruffieux Pascal/Fasel Roman

Bottom-up fabrication of graphene nanoribbons: From molecules to devices. Swiss NanoConvention, Zürich, 06-06 to 06-07 ◆

Darawish Rimah/ Gabriela Borin Barin/Jan Overbeck/Akimitsu Narita/Klaus Müllen/Pascal Ruffieux/Michel Calame/Roman Fasel1

On-surface synthesis and transfer of aligned graphene nanoribbons. Swiss Physical Society (Annual Meeting 2018), Lausanne, 08-28 to 08-31 ◆

Darawish Rimah/Gabriela Borin Barin/Maria El Abassi/Juan Pablo Llinas/Jan Overbeck/Klaus Müllen/Pascal Ruffieux/Jeffrey Bokor/Michel Calame/Roman Fasel

Ultra-narrow graphene nanoribbons for nanoelectronic devices. Graphene Week 2018, San Sebastian, ES, 09-10 to 09-14 ◆

Di Giovannantonio Marco/Eimre Kristjan/Yakutovich Aliaksandr/Beser Uliana/Chen Qiang/Mishra Shantanu/Urgel José I./Pignedoli Carlo A./Ruffieux Pascal/Narita Akimitsu/Müllen Klaus/Fasel Roman

On-surface synthesis of indenofluorene polymers. nc-AFM 2018, Porvoo, FI, 09-17 to 09-21 ●

Di Giovannantonio Marco/Urgel José I./Beser Uliana/Yakutovich Aliaksandr/Wilhelm Jan/Pignedoli Carlo A./Ruffieux Pascal/Narita Akimitsu/Müllen Klaus/Fasel Roman

On-surface synthesis of indenofluorene polymers using methyl groups to form five-membered rings. DPG 2018, Berlin, DE, 03-11 to 03-16 ●

Eimre Kristjan/Schütt Ole/Ditler Edward/Yakutovich Aliaksandr/Talirz Leopold/Pizzi Giovanni/Passerone Daniele/Pignedoli Carlo Antonio/

Jupyter and AiiDA based ecosystem for automatic characterization of graphene nanoribbons and molecules on surfaces. CCMX – NCCR MARVEL Materials Science Day 2018, Bern, 10-04 ◆

Eimre Kristjan/Di Giovannantonio Marco/Yakutovich Aliaksandr/Pignedoli Carlo A./Urgel Jose I./Mishra Shantanu/Chen Qiang/Ruffieux Pascal/Narita Akimitsu/Müllen Klaus/Fasel Roman/

On-surface synthesis and characterization of indenofluorene-based polymers: a combined experimental and computational study. MolCH: Swiss molecules at surfaces meeting, Bern, 06-29 🍷

Eimre Kristjan/Di Giovannantonio Marco/Sun Qiang/Urgel Jose I./Schütt Ole/Ditler Edward/Ruffieux Pascal/Passerone Daniele/Pignedoli Carlo A./Fasel Roman/

Computational characterization of one-dimensional carbon nanostructures: examples together with experiments and high-throughput automation based on AiiDA. pisacms 2018: Paris International School on Advanced Computational Materials Science, Paris, Sorbonne University, FR, 08-27 to 08-31 ♦

Eimre Kristjan/Buchs Gilles/Bercieux Dario/Gröning Oliver/Pignedoli Carlo A./Passerone Daniele/

Doubled quasi-bound states in metallic zigzag carbon nanotubes: an ab initio perspective. DPG Spring Meeting of the Condensed Matter Section, Berlin, DE, 03-11 to 03-16 🍷

Eimre Kristjan/Schütt Ole/Ditler Edward/Yakutovich Aliaksandr/Talirz Leopold/Pizzi Giovanni/Passerone Daniele/Pignedoli Carlo A./

Jupyter and AiiDA based ecosystem for high-throughput characterization of graphene nanoribbons and molecules on surfaces. COMDI 2018: International Workshop on Computational Design and Discovery of Novel Materials, Lausanne, EPFL, 09-10 to 09-12 ♦

Fasel Roman

Bottom-up fabrication of atomically precise graphene nanoribbons: From molecules to devices. Gesellschaft Deutscher Chemiker Kolloquium, Universität Marburg, DE, 01-24 🍷 ○

Fasel Roman

Neuartige Kohlenstoff-Nanomaterialien mit besonderen Eigenschaften. Naturwissenschaftliche Gesellschaft Winterthur, Winterthur, 04-06 🍷 ○

Fasel Roman

On-Surface Synthesis – Chemistry in 2D. E-MRS Spring Meeting, Strassbourg, FR, 06-18 to 06-21 🍷 ○

Fasel Roman

On-Surface Synthesis – Chemistry in 2D. ECOSS 34, Satellite Meeting: Molecular Reaction on Surfaces, Aarhus, DK, 08-27 to 08-31 🍷 ○

Fasel Roman

On-Surface Synthesis of Graphene Nanoribbons: from Molecules to Devices. 2nd From Carbon-Rich Molecules to Carbon-Based Materials Conference, Nassau, Bahamas, US, 06-07 to 06-09 🍷 ○

Fasel Roman

On-surface synthesis of graphene nanoribbons: From molecules to devices. ECOSS 34, Aarhus, DK, 08-27 to 08-31 🍷 ○

Fasel Roman

Topological quantum phases in graphene nanoribbons. On-Surface Synthesis International Workshop (OSS-18), St. Feliu, ES, 09-24 to 09-28 🍷 ○

Gröning Oliver

Electronic Structure Engineering in Graphene Nanoribbons. Seminar at the AIST (Institute for Advanced Industrial Science and Technology), Tsukuba, JP, 07-09 🍷 ○

Gröning Oliver

Topological quantum phases in atomically precise graphene nanoribbons. Seminar at the NIMS (National Institute of Materials Science), Tsukuba, JP, 07-10 🍷 ○

Gröning Oliver

Electronic structure engineering in graphene nanoribbons using on-surface synthesis. Swiss Nanoconvention 2018, Zürich, 06-06 to 06-07 🍷 ○

Gröning Oliver

Engineering of novel electronic materials by the atomically precise on-surface synthesis of graphene nanostructures. 6th International Renewable and Sustainable Energy Conference IRSEC 2018, Rabat, MA, 12-05 to 12-08 🍷 ○

Gröning Oliver/S. Wang/Q. Sun/P. Ruffieux and R. Fasel/W. Xu

On-surface synthesis of 1-dimensional pi-conjugated carbon systems. International Conference on Synthetic Metals 2018, Busan, KR, 07-02 to 07-06 🍷 ○

Gröning Oliver/S. Wang/Th. Dienel/P. Ruffieux and R. Fasel

Electronic structure engineering in graphene nanoribbons using on-surface synthesis. Workshop on Low-Dimensional Materials of the Korean Academy of Science and Technology (KAST), Busan, KR, 06-29 to 07-01 🍷 ○

Günzburger Gino/Widmer Roland/Liu Liwei/Gröning Oliver

Kelvin Probe Force Microscopy examination of defects of h-BN on Pt(111). DPG Spring Meeting 2018, Berlin, DE, 03-12 to 03-16 🍷

Günzburger Gino/Liu Liwei/Widmer Roland/Gröning Oliver

Kelvin Probe Force Microscopy investigation of MnPC on h-BN/Rh(111). nc-AFM 2018, Porvoo, FI, 09-17 to 09-21 🍷

Kinikar Amogh/Di Giovannantonio Marco/T Phanindra Sai/Ghosh Arindam/Ruffieux Pascal/Fasel Roman
Spin polarized state on the zigzag edge of graphene and hydrogenation of ZGNRs. Annual meeting of the Swiss Physical Society, Laussane, 08-28 to 10-31 🍷
Kinikar Amogh/Di Giovannantonio Marco/Ruffieux Pascal/Fasel Roman
Zigzag Graphene Nanoribbons in atomic and molecular Hydrogen atmospheres. International Workshop on On-Surface Synthesis, Sant Feliu de Guixols, ES, 09-23 to 09-28 ♦
Mishra Shantanu/Urgel José I./Wilhelm Jan/Giovannantonio Marco di/Pignedoli Carlo A./Ruffieux Pascal/Fasel Roman/
On-surface synthesis and STM studies of open-shell graphene nanostructures. International conference on Novel 2D materials explored via scanning probe microscopy & spectroscopy (2DSPM), San Sebastián, ES, 06-25 to 06-29 ♦
Mishra Shantanu/Pignedoli Carlo A./Ruffieux Pascal/Fasel Roman/
Topological modifications in graphene nanostructures. Deutsche Physikalische Gesellschaft (DPG) Spring Meeting, Berlin, DE, 03-11 to 03-16 🍷
Passerone Daniele/Pignedoli Carlo/Shinde Prashant/Eimre Kristjan/Fabrizio Alberto
Bottom-up Synthesis of Atomically Precise Defects in Nanographenes and Quantum Chemistry Calculations. On-Surface Synthesis International Workshop, Sant Feliu de Guixols, ES, 09-24 to 09-28 🍷
Pignedoli Carlo/Yakutovich A. V./Hoja, J./Passerone, D./Tkatchenko, A.
Role of van der Waals interactions in the enantioselectivity of PdGa(111) surfaces. ECOS34, Aarhus, DK, 08-26 to 10-31 🍷
Ruffieux Pascal
Bottom-up fabrication of atomically precise graphene nanoribbon. 15 th European Vacuum Conference, Geneva, 06-17 to 06-22 🍷 ○
Ruffieux Pascal
Bottom-up Fabrication of Atomically Precise Graphene Nanostructures. TU-D Workshop 2018, Langenlois, AT, 09-24 to 09-26 🍷 ○
Ruffieux Pascal
Bottom-up Fabrication of Graphene Nanoribbon Heterostructures. International Conference on Nanoscience and Technology (ICN+T 2018), Brno, CZ, 07-22 to 07-27 🍷 ○
Ruffieux Pascal
Bottom-up Fabrication of Graphene Nanoribbon Heterostructures. 4 th International Conference on Scanning Probe Microscopy on Soft and Polymeric Materials, Leuven, BE, 08-20 to 08-24 🍷 ○
Ruffieux Pascal
Graphene Nanoribbon Heterostructures. International Winterschool on Electronic Properties of Novel Materials (IWEPM 2018), Kirchberg, AT, 03-18 to 03-23 🍷 ○
Ruffieux Pascal/Gröning Oliver/Wang Shiyong/Fasel Roman
Topological Quantum Phases in Graphene Nanoribbons. Annual Meeting of the Swiss Physical Society, Lausanne, 08-28 to 08-31 🍷
Stolz Samuel/Gröning Oliver/Brune Harald/Widmer Roland
Enantioselective covalent coupling reactions on the chiral PdGa{111} surfaces. ECOS34, Aarhus, DK, 08-26 to 08-31 🍷
Stolz Samuel/Gröning Oliver/Brune Harald/Widmer Roland
Enantioselective covalent coupling reactions on the chiral PdGa{111} surfaces. ECMetAC Days 2018, Poznan, PL, 12-03 to 12-05 🍷
Sun Qiang/Kristjan Eimre/Edward Ditler/Oliver Gröning/Carlo Pignedoli/Pascal Ruffieux/Roman Fasel
Pyrene GNR – An ultra-low band gap ribbon with an unusual edge structure. MolCH, Bern, 06-29 🍷
Sun Qiang/Shiyong Wang/Wei Xu/Roland Widmer/Oliver Gröning/Pascal Ruffieux/Roman Fasel
On-surface synthesis and characterization of atomic carbon wires. Spring Meeting of the German Physical Society (DPG-18), Berlin, DE, 03-11 to 03-16 🍷
Sun Qiang/Kristjan Eimre/Edward Ditler/Oliver Gröning/Carlo Pignedoli/Pascal Ruffieux/Roman Fasel
Pyrene GNR- An ultra-low band gap ribbon near a topological phase boundary. ECOS 34, Aarhus, DK, 08-26 to 08-31 🍷
Urgel José Ignacio/Mishra Shantanu/Hayashi Hironobu/Di Giovannantonio Marco/Pignedoli Carlo A./Deniz Okan/Ruffieux Pascal/Yamada Hiroko/Fasel Roman
On-surface synthesis of higher acenes. On Surface Synthesis 18 (OSS18), San Feliu de Guixols, ES, 09-23 to 09-28 🍷
Widmer Roland/Stolz Samuel/Prinz Jan/Gröning Oliver/Brune Harald
Asymmetric coupling on the chiral PdGa{111} surfaces. DPG Conference, Berlin, DE, 03-11 to 03-16 🍷
Widmer Roland/Di Giovannantonio Marco/Urgel Jose Ignacio/Stolz Samuel/Muntwiler Matthias/Gröning Oliver/Fasel Roman
On-Surface Reactions – Chemistry in 2D. Photoelectron Spectroscopy at SLS 2.0, Villigen, 09-10 to 09-11 🍷 ○
Widmer Roland/Forrer Yves/Dienel Thomas/Gröning Oliver
Resolving Graphene Stacking on h-BN using Graphene Quantum Dots. 3S '18: Symposium on Surface Science, St. Christoph, AT, 02-25 to 03-03 🍷

<p>Andres Christian/Cabas-Vidani Antonio/Romanyuk Yaroslav/Tiwari Ayodhya Effect of metal gradients in sputtered precursor on properties of graded $\text{Cu}_2\text{ZnSn}_{1-x}\text{Ge}_x\text{Se}_4$ solar cells. E-MRS Spring Meeting 2018, Convention Center - Strasbourg, FR, 06-18 to 06-22 ◆</p>
<p>Andres Christian/Avancini Enrico/Carron Romain/Feurer Thomas/Fu Fan/Pisoni Stefano/Löckinger Johannes/Nishiwaki Shiro/Romanyuk Yaroslav/Buecheler Stephan/Tiwari Ayodhya High-efficiency flexible thin film solar cells based on single junction and tandem devices. 16.Nationale Photovoltaik Tagung, Kursaal Bern, 04-19 to 04-20 ◆</p>
<p>Andres Christian/Cabas-Vidani Antonio/Romanyuk Yaroslav/Tiwari Ayodhya Recent developments in kesterite thin film solar cells and future prospects for overcoming limiting bottlenecks. E-MRS Fall Meeting 2018, Warsaw Technical University, Warsaw, PL, 09-17 to 09-20 ●○</p>
<p>Andres Christian E-MRS Spring Meeting 2018, Convention Center – Strasbourg, FR, 06-18 to 06-22 ▲</p>
<p>Avancini Enrico/Löckinger Johannes Cu(In,Ga)Se₂ thin films – what did we learn about the absorber? CIGS solar cells – advanced characterization and novel concepts, Empa, Dübendorf, 10-29 ●○</p>
<p>Avancini Enrico/Keler Debora/Carron Romain/Arroyo Yadira/Erni Rolf/Priebe Agneszka/di Napoli Simone/Carrisi Martina/Sozzi Giovanna/Menozzi Roberto/Fu Fan/Buecheler Stephan/Tiwari Ayodhya N. Voids and compositional non-uniformities at CIGS surfaces and bulk. E-MRS Spring Meeting and Exhibit, Strasbourg, FR, 06-18 to 06-22 ●</p>
<p>Bodnarchuk Maryna Chemical engineering and self-assembly of colloidal semiconductor nanocrystals. Swiss NanoConvention, Zurich, 06-06 to 06-07 ●○</p>
<p>Bodnarchuk Maryna/Simon Boehme/Ivan Infante/Maksym Kovalenko Strategies for surface passivation of colloidal lead halide perovskite nanocrystals. EMRS Fall Meeting 2018, Warsaw, PL, 09-17 to 09-20 ●○</p>
<p>Bodnarchuk Maryna/Simon Boehme/Ivan Infante/Maksym Kovalenko Understanding and Improving the Surface Ligand Capping of Cesium Lead Bromide Nanocrystals. 2018 MRS Fall Meeting, Boston, US, 11-25 to 11-30 ●</p>
<p>Bolat Sami/Fuchs Peter/Knobelspies Stefan/Shorubalko Ivan/Tiwari Ayodhya N./Troester Gerhard/Romanyuk Yaroslav Inkjet printing and deep UV annealing of $\text{Y:Al}_2\text{O}_3$ dielectric layers for flexible thin film transistors. European Materials Research Society Spring Meeting 2018, Strasbourg, FR, 06-18 to 06-22 ●</p>
<p>Buecheler Stephan Insights to high efficiency CIGS thin-film solar cells and tandem devices with halide based Perovskites. 18th International Symposium on Clean Technology Program, Yeungnam University, KR, 12-07 ●○</p>
<p>Buecheler Stephan International Workshop on CIGS Solar Cells, Dübendorf, 10-29 ■</p>
<p>Buecheler Stephan Main organizer of the "Chalcogenide thin film solar cell" symposium at the E-MRS Spring Meeting 2018, Strasbourg, FR, 06-18 to 06-22 ■</p>
<p>Buecheler Stephan/Romanyuk Yaroslav International Chalcogenide Solar Cell Conference, Dübendorf, 10-19 ■</p>
<p>Buecheler Stephan/Sastre-Pellicer Jordi Garnet-type thin film electrolytes for solid state batteries. 1st Swiss and Surrounding Battery Days, Baden, 05-23 to 05-25 ◆</p>
<p>Buecheler Stephan/Sastre-Pellicer Jordi/Lin Tzu-Ying/Rawlence Michael/Filippin Alejandro N. Thin-film electrolytes and cathode current collectors for solid-state batteries. 1st International Symposium on Solid-State Batteries, Dübendorf, 05-28 to 05-29 ●○</p>
<p>Cabas-Vidani Antonio/Stefan G. Haass/Christian Andres/Raquel Caballero/Ayodhya N. Tiwari/Yaroslav E. Romanyuk High-efficiency $(\text{Li}_x\text{Cu}_{1-x})_2\text{ZnSn}(\text{S,Se})_4$ kesterite solar cells with heavy lithium alloying. EMRS 2018 spring, Strasbourg, FR, 06-18 to 11-22 ●</p>
<p>Cabas-Vidani Antonio/Mohammed Azzouzi/Stefan Haass/Jason Rohr/Yaroslav E. Romanyuk/Ayodhya N. Tiwari/Jenny Nelson On voltage losses evaluation of CZTSSe solar cells with Sn content variation. 9th Kesterite workshop, Ghent, BE, 11-28 to 11-30 ●</p>
<p>Carron Romain Insights into optical absorption, charge carrier collection losses and interfaces recombination in thin film solar cells. PV seminar, Laboratoire photovoltaïque, Université du Luxembourg, Belvaux, LU, 11-13 ●○</p>
<p>Carron Romain/Avancini Enrico/Feurer Thomas/Nishiwaki Shiro/Pisoni Stefano/Fu Fan/Andres Christian/Lingg Martina/Romanyuk Yaroslav E./Buecheler Stephan/Tiwari Ayodhya N. Bandgap of solar cell absorbers: A comparison of various determination methods. EMRS 2018 Spring Meeting, Strasbourg, FR, 06-18 to 06-22 ◆</p>

Carron Romain/Avancini Enrico/Feurer Thomas/Bissig Benjamin/Losio Paolo A./Figi Renato/Schreiner Claudia/Bürki Melanie/Bourgeois Emilie/Remes Z./Nesladek Milos/Buecheler Stephan/Tiwari Ayodhya N.

Refractive indices of layers and simulations of Cu(In,Ga)Se₂ solar cells. EMRS 2018 Spring Meeting, Strasbourg, FR, 06-18 to 06-22 ●

Feurer Thomas/Pisoni Sefano/Weiss Thomas/Avancini Enrico/Buecheler Stephan/Tiwari Ayodhya

Narrow bandgap Cu(In,Ga)Se₂ solar cells for CIGS/Perovskite tandem devices. E-MRS spring meeting, Strasbourg, FR, 06-18 to 06-22 ●

Feurer Thomas/Weiss Thomas/Torres-Sevilla Gallo/Buecheler Stephan/Tiwari Ayodhya

Narrow Bandgap Cu(In,Ga)Se₂ Solar Cells for Tandem Application. EU PVSEC, Brussels, BE, 09-24 to 09-28 ●

Feurer Thomas/Weiss Thomas/Torres-Sevilla Gallo/Buecheler Stephan/Tiwari Ayodhya

Narrow Bandgap Cu(In,Ga)Se₂ Solar Cells for Tandem Application. 14th CSPV, Xi'an, CN, 11-07 to 11-10 ● ○

Jordi Sastre Pellicer/Stephan Buecheler

Garnet-type thin film electrolytes for solid-state batteries. 1st Swiss and Surrounding Battery Days, Baden, 05-23 to 05-25 ◆

Kovalenko Maksym

Colloidal nanocrystals of APbX₃ [A=Cs⁺, CH(NH₂)₂⁺, X=Cl⁻, Br⁻, I⁻] perovskites with bright photoluminescence spanning the entire visible spectral range. International Conference on Perovskite Photonics and Optoelectronics (PEROPTO18), Rennes, FR, 03-01 ● ○

Kovalenko Maksym

Novel three-dimensional and low-dimensional metal halide perovskites: from light emission to hard radiation detection.. 256th ACS National Meeting & Exposition, Symposium "Soluble Inorganic Semiconductors", Boston, US, 08-19 to 08-23 ● ○

Kovalenko Maksym

Colloidal nanocrystals of APbX₃ [A=Cs⁺, CH₃NH₃⁺, CH(NH₂)₂⁺, X=Cl⁻, Br⁻, I⁻] perovskites with bright photoluminescence spanning the entire visible spectral range.. 255th ACS National Meeting & Exposition, New Orleans, US, 03-18 to 03-22 ● ○

Kovalenko Maksym

Colloidal nanocrystals of APbX₃ perovskites [A=Cs⁺, CH(NH₂)₂⁺, X= Cl⁻, Br⁻, I⁻]: synthesis, spectroscopy and applications. The 10th International Conference on Quantum Dots 2018, Toronto, CA, 06-24 to 06-29 ● ○

Kovalenko Maksym

Colloidal Nanocrystals of APbX₃ Perovskites [A=Cs⁺, CH(NH₂)₂⁺, X=Cl⁻, Br⁻, I⁻]: Surface Chemistry, Self-Assembly and Potential Applications. NanoGe International Conference "Nanophotonics by Nanocrystals", Torremolinos, Malaga, ES, 10-22 to 10-26 ● ○

Kovalenko Maksym

Highly luminescent colloidal nanocrystals of APbX₃ perovskites [A=Cs⁺, CH(NH₂)₂⁺, X=Cl⁻, Br⁻, I⁻]: synthesis, spectroscopy and applications. 4th JPH2018 National Perovskite Days (Journées Perovskites Hybrées), Grenoble, FR, 05-15 to 05-16 ● ○

Kovalenko Maksym

Highly luminescent lead halide perovskite nanocrystals: genesis, properties and applications. NANO KOREA 2018, Symposium "Advanced Nanomaterials", KINTEX Ilsan, KR, 07-11 to 07-13 ● ○

Kovalenko Maksym

Highly luminescent lead halide perovskite nanocrystals: synthesis, surface chemistry and applications. EMRS Fall Meeting 2018, Symposium K "Nanomaterials – electronics & – photonics", Warsaw, PL, 09-17 to 09-20 ● ○

Kovalenko Maksym

Near Infrared-Emissive Colloidal Multinary Lead Halide Perovskite Nanocrystals for Optoelectronic Applications. MRS Fall Meeting 2018, Symposium ET04, "Perovskite Solar Cells—Challenges and Opportunities", Boston, US, 11-25 to 11-30 ● ○

Kovalenko Maksym

Gordon Research Seminar (GRS): Colloidal Semiconductor Nanocrystals: Synthetic Strategies and Photochemical Properties of Semiconductor Nanocrystals, Bryant University, US, 07-14 to 07-15 ■

Kravchyk Kostiantyn

Anode Materials with High Areal Capacities for Lithium-Ion Batteries. Swiss and Surrounding Battery Days, Baden, 05-23 to 05-25 ●

Kravchyk Kostiantyn/Shutao Wang/Laura Piveteau/Frank Krumeich/and Maksym V. Kovalenko

Non-Aqueous Aluminium-Graphite Batteries: Status, Prospects and Future. 2018 Fall Meeting of the Swiss Chemical Society, Lausanne, 09-07 ◆

Kravchyk Kostiantyn/Shutao Wang/Laura Piveteau/Frank Krumeich/Maksym Kovalenko

Non-Aqueous Aluminium-Graphite Batteries—Status, Prospects and Future. 2018 MRS Spring Meeting, Phoenix, US, 04-02 to 04-06 ●

Lin Tzu-Ying/Jordi Sastre Pellicer/Alejandro Filippin/Michael Rawlence/Stephan Buecheler

Ionic Conductivity of Garnet-type Thin Film Li-La-Zr-O Electrolyte. IMLB 2018, Kyoto, JP, 06-17 to 06-22 ◆

<p>Lingg Martina/Munshi Amit/Sampath Walajabad S./Sites James R./Buecheler Stephan/Tiwari Ayodhya N. Investigation of barriers in CdTe_{1-x}Se_x solar cell absorbers. E-MRS 2018 Spring Meeting, Strasbourg, FR, 06-18 to 06-22 🍷</p>
<p>Löckinger Johannes/Nishiwaki Shiro/Andres Christian/Romanyuk Yaroslav E./Buecheler Stephan/Tiwari Ayodhya N. What did we learn about the buffer layer? Sharc25 Workshop, Empa Dübendorf, 10-29 🍷 ○</p>
<p>Löckinger Johannes/Nishiwaki Shiro/Andres Christian/Romanyuk Yaroslav E./Buecheler Stephan/Tiwari Ayodhya N. ALD-metal oxide buffer layer in CIGS solar cells. E-MRS spring meeting, Strasbourg, FR, 06-17 to 06-22 🍷</p>
<p>Nishiwaki Shiro/Romain Carron/Johannes Löckinger/Stephan Buecheler/Ayodhya N. Tiwari Improved performance of CIGS solar cells prepared using multistage co-evaporation at low temperature. E-MRS 2018 Spring Meeting, Strasbourg, FR, 06-18 to 06-22 ♦</p>
<p>Ochoa Mario Characterisation of solar cells: How to properly measure the efficiency of solar cells? HyMet project meeting, Empa, Duebendorf, 05-31 🍷</p>
<p>Pisoni Stefano All Thin Film Tandem Solar Cells and Mini-Modules with Perovskites and Chalcogenides. RFA NAREP + Energy Colloquium, Dübendorf, 04-09 🍷</p>
<p>Pisoni Stefano/Carron Romain/Moser Thierry/Feurer Thomas/Nishiwaki Shiro/Tiwari Ayodhya/Buecheler Stephan All-Thin-Film Flexible Tandem Solar Devices: The Promise of Future Low-Cost Photovoltaics. PhD Students' Symposium 2018, Duebendorf, 11-26 🍷</p>
<p>Pisoni Stefano/Moser Thierry/Fu Fan/Feurer Thomas/Carron Romain/Nishiwaki Shiro/Tiwari Ayodhya/Buecheler Stephan Flexible Perovskite Solar Cells: From Tandem Thin Film Solar Devices to All Laser-Scribed Mini-Modules. Peer Review: Nanostructured Materials, Dübendorf, 10-24 ♦</p>
<p>Pisoni Stefano/Moser Thierry/Fu Fan/Feurer Thomas/Carron Romain/Nishiwaki Shiro/Tiwari Ayodhya/Buecheler Stephan Flexible Perovskite Solar Cells: From Tandem Thin Film Solar Devices to All Laser-Scribed Mini-Modules. Industrialization Of Perovskite Thin Film Photovoltaic Technology Workshop, Bern, 10-04 ♦</p>
<p>Pisoni Stefano/Carron Romain/Moser Thierry/Feurer Thomas/Fu Fan/Nishiwaki Shiro/Tiwari Ayodhya/Buecheler Stephan Flexible Perovskite/Cu(In,Ga)Se₂ Tandem Solar Cells by Tailoring of Lead Iodide Growth. EMRS 2018 Fall Meeting, Warsaw, PL, 09-17 to 09-20 🍷</p>
<p>Pisoni Stefano/Carron Romain/Moser Thierry/Feurer Thomas/Nishiwaki Shiro/Tiwari Ayodhya/Buecheler Stephan Multi-Stage Deposition for Efficient Flexible Perovskite/Cu(In,Ga)Se₂ Tandem Solar Cells. EMRS 2018 Spring Meeting, Strasbourg, FR, 06-18 to 06-22 ♦</p>
<p>Pisoni Stefano/Carron Romain/Moser Thierry/Feurer Thomas/Fu Fan/Nishiwaki Shiro/Tiwari Ayodhya/Buecheler Stephan Tailored Lead Iodide Growth for Efficient Flexible Perovskite Solar Cells and Thin-Film Tandem Devices. PSCO 2018, Lausanne, 09-30 to 10-02 🍷</p>
<p>Pisoni Stefano EMRS 2018 Spring Meeting, Strasbourg, FR, 06-18 to 06-22 ▲</p>
<p>Romanyuk Yaroslav Scientific committee. 9th European Kesterite Workshop, Gent, BE, 11-28 to 11-30 ■</p>
<p>Romanyuk Yaroslav/Haass Stefan/Cabas-Vidani Antonio/Andres Christian/Avancini Enrico/Nishiwaki Shiro/Buecheler Stephan/Tiwari Ayodhya Alkali doping for high-efficiency thin film solar cells based on chalcogenide Cu(In,Ga)Se₂ and Cu₂ZnSn(S,Se)₄ absorbers. ENGE 2018, Jeju, KR, 11-10 to 11-13 🍷 ○</p>
<p>Romanyuk Yaroslav/Haass Stefan/Cabas-Vidani Antonio/Andres Christian/Avancini Enrico/Nishiwaki Shiro/Buecheler Stephan/Tiwari Ayodhya Alkali doping for high-efficiency thin film solar cells based on chalcogenide Cu(In,Ga)Se₂ and Cu₂ZnSn(S,Se)₄ absorbers. ENGE 2018, Jeju, KR, 11-10 to 11-13 🍷 ○</p>
<p>Romanyuk Yaroslav/Jäger Timo/Torres-Sevilla Galo/Liu Yujing/Greuter Lukas/Buecheler Stephan/Tiwari Ayodhya Alternative transparent conductors for flexible CIGS thin-film solar cells. CIMTEC 2018, Perugia, IT, 06-11 to 06-14 🍷 ○</p>
<p>Romanyuk Yaroslav/Jakob Heier High-Precision Printing of Functional Materials and Devices. TECHNOLOGY BRIEFING, Dübendorf, 01-24 🍷 ○</p>
<p>Romanyuk Yaroslav/Jakob Heier High-Precision Printing of Functional Materials and Devices. TECHNOLOGY BRIEFING, Dübendorf, 01-24 🍷 ○</p>

Romanyuk Yaroslav/Verma Anand/Bolat Sami/Heier Jakob

Ink-jet printing. Workshop, Dübendorf, 07-24 ■

Sastre Pellicer Jordi

Towards high energy and power density all-solid-state thin film Li-ion batteries. OEPHO Seminar, Winterthur, 02-07 to 11-07 ● ○

Sastre Pellicer Jordi/Habtom D. Asfaw/Tzu-Ying Lin/Alejandro N. Filippin/Michael Rawlence/Stephan BuechelerOn the ionic conductivity in thin-film Li₇La₃Zr₂O₁₂ electrolyte materials for all-solid-state batteries. SimOEP 2018, Winterthur, 09-04 to 09-06 ●**Sastre Pellicer Jordi/Tzu-Yin Lin/Alejandro N. Filippin/Stephan Buecheler**

A thin-film LLZO electrolyte for all-solid-state batteries. Third Bunsen Colloquium on Solid-State Batteries, Frankfurt, DE, 11-14 to 11-16 ◆

Sastre Pellicer Jordi/Tzu-Ying Lin/Alejandro N. Filippin/Michael Rawlence/Stephan BuechelerHow Li amount and incorporation of three-valent elements affect morphology, stability and ionic conductivity of LLZO thin films. 1st International Symposium on Solid-State Batteries, Dübendorf, 05-28 to 05-29 ◆**Sastre Pellicer Jordi/Tzu-Ying Lin/Alejandro N. Filippin/Stephan Buecheler**

How Li content in as-deposited films and incorporation of Al affect morphology, phase and ionic conductivity of LLZO thin films. 2018 E-MRS Spring Meeting, Strasbourg, FR, 06-18 to 06-22 ◆

Wang Shutao/Kostiantyn V. Kravchyk/Alejandro N. Filippin/Ulrich Müller/Ayodhya N. Tiwari/Stephan Buecheler/Maryna I. Bodnarchuk/Laura Piveteau/Frank Krumeich/Maksym V. Kovalenko

Efficient Aluminum Chloride–Graphite Battery and its Novel Current Collector. 2018 E-MRS fall meeting, Warsaw , PL, 09-17 to 09-20 ●

Wang Shutao/Kostiantyn V. Kravchyk/Alejandro N. Filippin/Frank Krumeich/Maksym V. Kovalenko

Kish Graphite Flakes as a Cathode Material for an Aluminum Chloride–Graphite Battery. MRS spring meeting 2018, Phoenix, US, 04-02 to 04-06 ◆

Engineering Sciences**Meier Urs**

Faserverbundwerkstoff-Visionen der 1970er und 80er Jahre: Update 2018. Carbon Composites, DACH-Veranstaltung der CC Bau-AGs, ZHAW Architektur, Gestaltung und Bauingenieurwesen, Winterthur. 21.6. ● ○

Meier Urs

An Update of Past Visions of Fiber Reinforced Megastructures. 40th IABSE Symposium: Tomorrow's Megastructures, La Cité de Nantes Events Center, FR. 19.9. to 21.9. ● ○

Meier Urs

Large Structures of Advanced Composites in Civil Engineering. SAMPE Conference 18: Large Structures in Composite Engineering, Hilton Ageas Bowl, Southampton, GB. 11.9. to 13.9. ● ○

Domaschke Sebastian/A. Ehret3D and 2.5D computational models of electrospun mats. 6th European Conference on Computational Mechanics (ECCM 6), Glasgow, GB, 06-11 to 06-15 ●**Domaschke Sebastian/A. Ehret**

Seeding and growing RVEs of electrospun fibre networks. Annual Meeting of GAMM (2018), Munich, DE, 03-19 to 03-23 ●

Ehret Alexander/S. Domaschke/A. Morel/S. Kolokytha/R. Kaufmann/G. FortunatoAn image-informed computational model of electrospun fibrous materials. 8th World Congress of Biomechanics, Dublin, IE, 07-08 to 07-12 ◆**Ehret Alexander/Stracuzzi A./Zündel M./Mazza E.**Heterogeneity of chemomechanical signals in collagenous tissues. 6th European Conference on Computational Mechanics (ECCM 6) , Glasgow, GB, 06-11 to 06-15 ●**Ehret Alexander/R. Kuravi/K. Leichsenring/M. Böhl/E. Mazza**Microscopy and computational analyses of meso-scale structure and its role for mechanics in skeletal muscle tissue. 8th World Congress of Biomechanics, Dublin, IE, 07-08 to 07-12 ●**Ehret Alexander/M.B. Rubin**

Rari- and multi-constant theories of elasticity and related aspects of anisotropy in soft biological tissues. Annual Meeting of GAMM (2018), Munich, DE, 03-19 to 03-23 ●

Kuravi Ramachandra/K. Leichsenring/M. Böhl A. Ehret

A Histology Based Investigation of Passive Mechanical Response of Skeletal Muscle tissue Incorporating of Mesoscale Structure.. MaP Graduate Symposium 2018, ETHZ, Zürich , 06-26 ●

Kuravi Ramachandra/M. Böhl/A. EhretInvestigating the Role of Meso-scale Structure on the Passive Mechanical Response of Skeletal Muscle Tissues. 89th Annual Meeting of GAMM (2018), Munich, DE, 03-19 to 03-23 ●**Mazza Edoardo/K. Bircher/A. Ehret**Fracture Behavior of soft biological tissues. 8th World Congress of Biomechanics, Dublin, IE, 07-08 to 11-12 ● ○

■ Organisation

◆ Poster

● Lecture

○ invited

▲ Chair

Mazza Edoardo/K. Bircher/A. Ehret/M. Pensalfini/M. Zündel
Soft collagenous tissues: brittle but tough. European Conference Solid mechanics, Bologna, IT, 07-03 to 07-06 ● ○
Affolter Christian
Testing strategies and failure modes of corrugated laminate plates and their connections, Engineering Failure Analysis. ICEFA-8, Budapest, HU, 07-09 ●
Aiyangar Ameet K./Rynearson Bryan/Dombrowski Malcolm/LeVasseur Clarissa/Adgate Zach/Donaldson William F./Lee Joon/Anderst William
Continuous Intervertebral Kinematics Indicate Aberrant Motion Patterns in Lumbar Degenerative Spondylolisthesis. ORS 2018 Annual Meeting, New Orleans, US, 03-09 to 03-13 ◆
Aiyangar Ameet K./Dombrowski Malcolm/Rynearson Bryan/LeVasseur Clarissa/Adgate Zach/Donaldson William F./Lee Joon/Anderst William
Static Clinical Radiographs Do Not Fully Capture Dynamic Instability of the Lumbar Spine in Degenerative Spondylolisthesis Patients. ORS 2018 Annual Meeting, New Orleans, US, 03-09 to 03-13 ◆
Baensch Franziska/Hüsken Götz/Pirskawetz Stephan/Gründer Klaus-Peter/Kadoke Daniel/Baer Wolfgang/Wossidlo Peter/Homann Tobias/Prager Jens/Stajanca Pavol/Abdel-Habib Karim/Chruscicki Sebastian/Hussels Maria/Zauner Michaela/Sause Markus G.R./Vergeynst Lidewei/Brunner Andreas J./Niemz Peter
Acoustic Emission Testing. INFRSTAR Training Week #3, Aalborg, DK, 06-05 ●
Brunner Andreas J.
Fatigue Fracture of Polymer Composites – Estimating Defect Sizes. Presentation at TU Delft, Delft, NL, 10-16 ● ○
Brunner Andreas J.
Fiber-Reinforced Polymer Composites Test Specimen Design for Selected Damage Mechanisms, Materials Design and Applications. MDA18, Porto, PT, 07-05 ●
Brunner Andreas J.
Gedanken zu mikroskopischen Schädigungsmechanismen bei zyklischer bruchmechanischer Belastung von Metallen / Legierungen und Faserverbund-Kunststoffen. 42. Sitzung Fachgruppe Strukturintegrität des SVMT, Paul Scherrer Institut PSI, Villigen, 03-08 ●
Brunner Andreas J.
Vorstellung Schallemissionsprüfverfahren (SEP). DGZfP-Fachausschuss Schallemissionsprüfverfahren (SEP), 4. Sitzung des Fachausschusses Faserkunststoffverbunde, Institut für Verbundwerkstoffe GmbH, Kaiserslautern, DE, 06-19 ● ○
Brunner Andreas J. /Clerc Gaspard/Niemz Peter
Acoustic Emission monitoring of adhesively bonded wood joints under quasistatic and cyclic fatigue mode II flexure loads using end-notch-flexure specimens. EWGAE, 33 rd European Conference on Acoustic Emission Testing, Senlis, FR, 09-12 to 09-14 ●
Comensoli Lucrezia
Recycling of carbon fiber reinforced composites; How fungi can help? Annual excursion for the students of the University of Freiburg (D), Empa, St. Gallen, 03-08 ● ○
Comensoli Lucrezia
The art of survival: a sustainable alternative for the production and processing of materials. Materialien für Nachhaltiges Bauen, Empa, Dübendorf, 08-24 ● ○
Comensoli Lucrezia
Title presentation 1: Microorganisms at the rescue of cultural heritage. Title presentation 2: The art of survival to the rescue of iron artwork Title presentation 3: Microbial degradation: a su. University of Applied Sciences and Arts of Southern Switzerland, Laboratory for Applied Microbiology, Bellinzona, 06-18 ● ○
Comensoli Lucrezia/Colpo Andrea/Heeb Markus/Schwarze Francis W.M.R./Terrasi Giovanni
Microbial degradation of epoxy resins: a sustainable strategy for recycling carbon fiber reinforced composite materials. 17 th International Symposium on Microbial Ecology (ISME17), Leipzig, DE, 08-12 to 08-17 ◆
Dombrowski Michael/Dombrowski Malcolm/Rynearson Bryan/LeVasseur Clarissa/Adgate Zachary/Donaldson William/Lee Joon/Aiyangar Ameet/Anderst William
Dynamic Imaging of Degenerative Spondylolisthesis Reveals Mid-Range Dynamic Lumbar Instability Not Evident on Static Clinical Radiographs. Title of the Event: 45 th ISSLS (International Society for the Study of the Lumbar Spine) Annual Meeting 2018., Banff, CA, 05-14 to 05-18 ●
Ebschner Peter
High-Performance Precast Concrete Elements Reinforced with CFRP – Anchorages in Carbolith? Workshop: Application of High Performance Composites for Concrete Structures, Leipzig, DE, 07-23 ● ○
Kovacs Gabor
Industrialization of EAP. MICTACT Training School, Darmstadt, DE, 01-22 to 01-25 ● ○
Kovacs Gabor
Manufacturing Polymer Transducers: Opportunities and Challenges. Conference on Smart Structures and Nondestructive Evaluation 2018, Denver, US, 03-03 to 03-07 ● ○
Piskoty Gabor/Affolter Christian/Weisse Bernhard
Safety assessment of monocable aerial ropeways with regard to rope derailment. Engineering Failure Analysis ICEFA-8, Budapest, HU, 07-09 ●

Valet Sebastian/Keller Sara/Piskoty Gabor/Weisse Bernhard/Kümmerle Jan

Influence of the pin design on the stability of transfixation pin casting systems used in equine fracture treatment. Engineering Failure Analysis ICEFA-8, Budapest, HU, 07-09 🍷

Allegrini Jonas/Kubilay Aytac/Carmeliet Jan/Derome Dominique

A three scale approach for assessing the thermal comfort in urban environments. 12th International Manikin and Modelling Meeting (12i3m), St. Gallen, 08-29 to 08-31 🍷 ○

Allegrini Jonas

A wind tunnel study on the impact of building morphologies on forced and mixed convective heat removal from urban environments. 10th International Conference on Urban Climate/ 14th Symposium on the Urban Environment, New York, US, 08-06 to 08-10 🍷

Allegrini Jonas

Effectiveness of different urban heat island mitigation measures evaluated with a model solving for air flow, radiation and heat and moisture transport in urban materials. The 7th International Symposium on Computational Wind Engineering 2018, Seoul, KR, 06-18 to 06-22 🍷

Allegrini Jonas/Carmeliet Jan

Studying the impact of local urban heat islands on the space cooling demand of buildings using coupled CFD and building energy simulations. 7th International Building Physics Conference, Syracuse, US, 09-23 to 09-26 🍷

Derome Dominique

"Understanding the Physics of Painted Canvas and Wood: Multiscale Experimental and Modelling Study of Combined Hygrothermal and Mechanical Behavior." Gordon Research Conference in Cultural Heritage Research, Barcelona, ES, 07-22 to 07-27 🍷

Derome Dominique

Droplet impact and penetration on porous stones. Interpore, New Orleans, US, 05-14 to 05-17 🍷

Derome Dominique

Understanding and predicting the hysteretic hygromechanical behavior of wood S2 cell layer with atomistic simulations. Plant Biomechanics Conference, Montreal, CA, 08-09 to 08-14 🍷

Derome Dominique/Carl Stephan/Vontobel Peter/Carmeliet Jan

Adsorption and film forming of train of water droplets impacting porous stones. International Building Physics Conference, IBPC 2018, Syracuse, US, 09-23 to 09-28 🍷

Dorostkar Omid/Carmeliet Jan

Effect of grain friction on characteristics of seismic cycles in a sheared granular fault gouge. Swiss Geoscience Meeting 2018, Bern, 11-30 to 12-01 🍷

Dorostkar Omid/Paul Johnson/Robert Guyer/Chris Marone/Jan Carmeliet

Evolution of potential energy during stick-slip dynamics in a dry and fluid saturated granular fault gouges investigated by 3D coupled CFD-DEM. EGU 2018, Vienna, AU, 04-08 to 04-13 🍷

Dorostkar Omid/Paul Johnson/Robert Guyer/Chris Marone/Jan Carmeliet

Fluid-assisted mobilization of particles in sheared granular media: 3D CFD-DEM simulation of stick-slip dynamics in faults with granular gouge. Geomod 2018, Barcelona, ES, 10-01 to 10-06 🍷

Ferrari Andrea/Aytac Kubilay/Dominique Derome/Jan Carmeliet

The impact of urban materials on the urban micro-climate. Water Tunnel Opening, Empa, 06-15 🍷

Fischer Robert

Fast X-ray microtomography to understand capillary uptake in yarns. 2nd Empa internal User Meeting for X-ray Computed Tomography, Dübendorf, 11-02 🍷

Fischer Robert/Derome Dominique/Rossi René/Carmeliet Jan

Understanding Wicking in Textile by Multiscale Imaging and Modeling. InterPore 2018, New Orleans, US, 05-14 to 05-18 🍷

Kubilay Aytac/Carmeliet Jan/Derome Dominique

Parametric study of wetting of urban materials and its impact on the thermal comfort in a street canyon. 1st International Conference on New Horizons in Green Civil Engineering, Victoria, BC, CA, 04-25 to 04-27 🍷

Kubilay Aytac/Carmeliet Jan/Derome Dominique

Understanding and using evaporative cooling in urban microclimate for mitigating local heat island effect. 20. Status-Seminar 2018, ETH Zurich, 09-06 to 09-07 🍷

Kubilay Aytac/Carmeliet Jan/Derome Dominique

Using rain and vegetation to improve thermal comfort in a hot street canyon with fully-integrated urban climate modeling. 7th International Building Physics Conference, Syracuse, NY, US, 09-23 to 09-26 🍷

Manickathan Lento/Kubilay Aytac/Defraeye Thijs/Allegrini Jonas/Derome Dominique/Carmeliet Jan

Integral vegetation model for studying the cooling potential of vegetation in urban street canyons. 10th International Conference on Urban Climate, New York, NY, US, 08-06 to 08-10 🍷

Manickathan Lento/Kubilay Aytac/Defraeye Thijs/Allegrini Jonas/Derome Dominique/Carmeliet Jan

Integrated vegetation model for studying the cooling potential of trees in urban street canyons. 7th International Building Physics Conference, Syracuse, NY, US, 09-23 to 09-26 🍷

Manickathan Lento/Kubilay Aytac/Defraeye Thijs/Allegrini Jonas/Derome Dominique/Carmeliet Jan	The influence of vegetation on the pedestrian thermal comfort in a street canyon. 1 st International Conference on New Horizons in Green Civil Engineering, Victoria, BC, CA, 04-25 to 04-27 🏠
Mazloomi Moqaddam Ali/Dominique Derome/Feifei Qin/Jan Carmeliet	Liquid redistribution in complex structures studied with lattice Boltzmann modeling. Empa Peer Review, Dubendorf, 10-23 ♦
Mazloomi Moqaddam Ali/Dominique Derome/Jan Carmeliet	Equivalent contact angle for droplets impacting on checkboard-patterned surfaces. MSW2018 – Aalto University, Espoo, FI, 05-13 to 05-18 ♦
Qin Feifei/Luca Del Carro/Ali Mazloomi Moqaddam/Qinjun Kang/Dominique Derome/Jan Carmeliet	LBM study of non-isothermal liquid evaporation in specifically designed porous media. InterPore2018, New Orleans, US, 05-14 to 05-17 🏠
Qin Feifei/Ali Mazloomi Moqaddam/Qinjun Kang/Dominique Derome/Jan Carmeliet	Simulation of colloids drying in porous media with hybrid two-phase LBM. 27 th International Conference on Discrete Simulation of Fluid Dynamics, Worcester, US, 06-25 to 06-29 🏠
Tsalicoglou Christina/Allegrini Jonas/Carmeliet Jan	PIV Measurements of the Effect of Buoyancy on Urban Flows. 19 th International Symposium on the Application of Laser and Imaging Techniques to Fluid Mechanics, Lisbon, PT, 07-16 to 07-19 🏠
Tsalicoglou Christina/Allegrini Jonas/Carmeliet Jan	Wind tunnel measurements of buoyancy-driven urban flows. 18 th International Symposium on Flow Visualization, Zürich, 06-26 to 06-29 🏠
Tsalicoglou Christina/Allegrini Jonas/Carmeliet Jan	Wind Tunnel Measurements of Local Heat Islands in Urban Environments. 10 th International Conference on Urban Climate, New York, US, 08-06 to 08-10 ♦
Zhang Chi/Dominique Derome/Jan Carmeliet	First and second order transition during water adsorption in hemicellulose and its consequence on hygro-mechanical behavior. InterPore 10 th Annual Meeting and Jubilee, New Orleans, US, 05-14 to 05-17 🏠
Zhang Chi/Benoit Coasne/Sinan Ketten/Dominique Derome/Jan Carmeliet	Hygro-thermo-mechanical behavior of softwood lignin studied by molecular dynamics. Engineering Mechanics Institute Conference 2018 (EMI 2018), Cambridge, US, 05-29 to 06-01 🏠
Zhang Chi/Dominique Derome/Jan Carmeliet	Multiscale Modeling of Crystalline Cellulose Microfibril Interface. 6 th European Conference on Computational Mechanics (ECCM 6), Glasgow, GB, 06-11 to 06-15 🏠
Zhou Xiaohai/Jan Carmeliet/Dominique Derome	Assessment of risk of freeze-thaw damage in internally insulated masonry under climate change. CIB Symposium on Durability and Climate Change, Ottawa, CA, 09-19 to 09-23 🏠
Zhou Xiaohai/Jan Carmeliet/Dominique Derome	Retrofitting historic buildings: interior insulation solutions for masonry walls in Switzerland. 20. Status-Seminar 2018, ETH Zurich, 09-06 to 09-07 🏠
Zhou Xiaohai/Guylaine Desmarais/Peter Vontobel/Jan Carmeliet/Dominique Derome	Water uptake in masonry: effect of brick/mortar interface. 7 th International Building Physics Conference, Syracuse, NY, US, 09-23 to 09-26 🏠
Abouali Sahar/Shahverdi Moslem/Ghassemieh Mehdi/Motavalli Masoud	Assessment of flexural strengthening of RC beams with iron-based shape memory alloys. 11 th International Congress on Civil Engineering, Tehran / Iran, IR, 05-08 to 05-10 🏠
Aljabar N.J./Zhao X.L./Al-Mahaidi Riadh/Ghafoori Elyas/Motavalli Masoud/Koay Yew-Chin	The effect of the CFRP properties on the fatigue strengthening of steel plates in multiaxial loading. IABMAS 2018, 9 th International Conference on Bridge Maintenance, Safety and Management, Melbourne, AU, 07-09 to 07-13 🏠
Breveglieri Matteo/Hosseini Ardan/Czaderski Christoph	FRP-to-Concrete Debonding – Global and Local Bond Behaviour. CICE 2018, the 9 th International Conference on Fibre-Reinforced Polymer (FRP) Composites in Civil Engineering, Paris, FR, 07-17 to 07-19 🏠
Breveglieri Matteo/Weber Benedikt/Czaderski Christoph	Solar radiation effects on the epoxy adhesive temperature used to bond CFRP to concrete road bridges. COMSOL Conference, Lausanne, 10-22 to 10-24 🏠
Ehrhart Thomas/Steiger René/Palma Pedro/Franghi Andrea	Estimation of tensile strength of European beech timber boards based on the analysis of density, dynamic MOE, and local fibre direction. WCTE 2018, World Conference on Timber Engineering, Seoul, KR, 08-20 to 08-23 🏠
Ehrhart Thomas/Steiger René/Franghi Andrea	Mechanical properties of European beech glued laminated timber. 5 th Meeting of the International Network on Timber Engineering Research INTER, Tallinn, EE, 08-13 to 08-16 🏠
Ehrhart Thomas/Palma Pedro/Steiger René/Franghi Andrea	Numerical and experimental investigations on the mechanical properties of glued laminated timber beams made from European beech wood. WCTE 2018, World Conference on Timber Engineering, Seoul, KR, 08-20 to 08-23 🏠

Structural Engineering

Ghafoori Elyas/Hosseini Ardalan/Pellissier E./Hueppi Martin/Motavalli Masoud	Application of Pre-stressed Un-bonded CFRP for Strengthening of Metallic Structures. CICE 2018, the 9 th International Conference on Fibre-Reinforced Polymer (FRP) Composites in Civil Engineering, Paris, FR, 07-17 to 07-19 ●
Ghafoori Elyas/Hosseini Ardalan/Al-Mahaidi Riadh/Zhao Xiao-Ling/Motavalli Masoud/Koay Yew-Chin	Prestressed FRP-Strengthening and Wireless Monitoring of a Metallic Bridge in Australia. IABMAS 2018, 9 th International Conference on Bridge Maintenance, Safety and Management, Melbourne, AU, 07-09 to 07-13 ●
Harmanci Yunus/Zile Edmunds/Michels Julien/Chatzi Eleni	Cohesive Zone Modelling of a Prestressed Non-mechanical CFRP Anchorage subjected to Freeze-Thaw Cycles. CICE 2018, the 9 th International Conference on Fibre-Reinforced Polymer (FRP) Composites in Civil Engineering, Paris, FR, 07-17 to 07-19 ●
Hosseini Ardalan/Ghafoori Elyas/Sadeghi Marzaleh Abdola/Motavalli Masoud	Feasibility of Accelerated Curing for Strengthening of Steel Members by Prestressed Bonded CFRP Plates. CICE 2018, the 9 th International Conference on Fibre-Reinforced Polymer (FRP) Composites in Civil Engineering, Paris, FR, 07-17 to 07-19 ●
Hosseini Ardalan/Motavalli Masoud/Nussbaumer Alain/Zhao Xiao-Ling/Al-Mahaidi Riadh	Flat Prestressed Unbonded Reinforcement (FPUR) System for Strengthening of Steel I-Beams. IABMAS 2018, 9 th International Conference on Bridge Maintenance, Safety and Management, Melbourne, AU, 07-09 to 07-13 ●
Hosseini Ardalan/Barbezat Michel/Michels Julien/Ghafoori Elyas/Motavalli Masoud/Terrasi Giovanni	Glass Transition Evaluation of Commercially Available Epoxy Adhesives for Strengthening of Steel Structures with Bonded CFRP Plates. CICE 2018, the 9 th International Conference on Fibre-Reinforced Polymer (FRP) Composites in Civil Engineering, Paris, FR, 07-17 to 07-19 ●
Izadi Mohammadreza/Ghafoori Elyas/Motavalli Masoud/Maalek Shahrokh/Hosseini Ardalan	Shape memory alloy (SMA) strips for fatigue strengthening of cracked steel plates. CICE 2018, the 9 th International Conference on Fibre-Reinforced Polymer (FRP) Composites in Civil Engineering, Paris, FR, 07-17 to 07-19 ●
Jockwer Robert/Wiehle Philipp/Palma Pedro/Klippel Michael/Wapp Andreas/Frangi Andrea/Hebel Dirk	Structural behaviour and design of timber connections with dowels and slotted-in plates made of bamboo composite. WCTE 2018, World Conference on Timber Engineering, Seoul, KR, 08-20 to 08-23 ●
Moshiri Niloufar/Mostofinejad Davood/Tajmir-Riahi Amir	Bond Behavior of pre-cured CFRP Strips to Concrete using Externally Bonded Reinforcement on Groove (EBROG) Method. CICE 2018, the 9 th International Conference on Fibre-Reinforced Polymer (FRP) Composites in Civil Engineering, Paris, FR, 07-17 to 07-19 ●
Palma Pedro/Frangi Andrea	Parametric studies on the fire resistance of steel-to-timber dowelled connections loaded perpendicularly to the grain. SiF 2018 / 10 th International Conference on Structures in Fire FireSERT, Workshop-Thermal Exposure of Combustible and Incombustible Structures in Fire, Belfast, IE, 06-06 to 06-08 ●
Shahverdi Moslem/Vassilopoulos A.P./Keller T.	Mixed-mode quasi-static fracture behavior of GFRP/BALSA Sandwiches. 12 th International Conference on Sandwich Structures (ICSS-12), Lausanne, 08-19 to 08-22 ●
Tajmir-Riahi Amir/Davood Mostofinejad/Moshiri Niloufar	Bond Restistance of a Single Groove in EBROG Method to Attach CFRP Sheets on Concrete. CICE 2018, the 9 th International Conference on Fibre-Reinforced Polymer (FRP) Composites in Civil Engineering, Paris, FR, 07-17 to 07-19 ●
Baldini Luca /Weber Robert/Fumey Benjamin	Absorption-based Long-term Thermal Energy Storage – Understanding Mass Transfer in Aqueous Sodium Hydroxide Solutions. 7 th storage symposium of SCCER Heat and electricity storage, Rapperswil , 11-06 ◆
Baldini Luca	Innovationen im NEST – Sind saisonale Speicher bereits einsatzfähig? Fachtagung Eco Bau und NNBS, World Trade Center Zurich, 05-15 ●
Baldini Luca	SCCER Efficiency in industrial processes. Waste water heat recovery at the building scale – Status update, Luzern , 09-13 to 09-14 ●
Bollinger Andrew/Heer Philipp/Largo Reto	Digital Hub (dhub) @ Empa. Digitalization Topical Day, Empa, Duebendorf, 03-28 ●
Bollinger Andrew/Yazdanie Mashael/Marquand Julien	Design optimization of renewables-based decentralized energy systems with the Ehub Tool. Brenet Statusseminar, Zurich, 09-06 to 09-07 ◆
Bünning Felix	Heat demand forecasting in the Nest building with the help of artificial neural networks. Brenet Statusseminar , Zürich , 09-05 to 09-07 ●
Dominguez Cristina/Orehounig Kristina/Carmeliet Jan	Forecasting Rural Energy Demand at a Broad Geographic Scope. Empa Peer Review 2018, Duebendorf, 10-24 ◆
Dominguez Cristina/Orehounig Kristina/Carmeliet Jan	Facilitating solar-based rural electrification projects in South Africa by applying a bottom-up energy demand modelling approach.. 5 th Southern African Solar Energy Conference (SASEC), Durban, ZA, 06-25 to 06-27 ●

Urban Energy Systems

Dominguez Cristina/Orehounig Kristina/Carmeliet Jan
Modelling of rural electrical appliances saturation in developing countries to project their electricity demand: A case study of sub-Saharan Africa. 31 st International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems (ECOS), Guimaraes, PT, 06-17 to 11-21 🍷
Dominguez Cristina/Orehounig Kristina/Carmeliet Jan
One step further for electrifying rural households in Africa: A novel electricity demand modelling approach.. Building Simulation and Optimization Conference (BSO), Cambridge, GB, 09-11 to 09-12 🍷
Dorer Viktor
Transformationsstrategien für Quartiere. SCCER FEEB&D Faktor 3 Forum, ETH Zürich, 09-07 🍷 ○
Fumey Benjamin
Application specific temperatures for storage material and component testing. 3 rd IEA SHC Task 58 / ECES Annex 33 experts meeting, Ljubljana, SI, 04-09 to 04-11 🍷 ○
Fumey Benjamin
Inventory of sorption heat storage component and system designs currently under investigation by task and annex partners. 4 th IEA SHC Task 58 / ECES Annex 33 experts meeting, Graz , AT, 10-01 to 10-03 🍷 ○
Fumey Benjamin
Liquid sorption heat storage spiral finned heat and mass exchanger, steps towards increased rate of absorption. 12 th International Renewable Energy Storage Conference IRES, Duesseldorf, DE, 03-13 to 03-15 🍷
Gabrielli Paolo/Fürer F/Murray Portia/Orehounig Kristina/Carmeliet Jan/Gazzani Matteo/Mazzotti Marco
A time-series-based approach for robust design of multi-energy systems with energy storage. 8 th European symposium on computer aided process engineering, Graz, AT, 06-10 to 06-13 🍷
Marquant Julien/Bollinger Andrew/Evins Ralph/Carmeliet Jan
Quantification of distributed energy systems potential combining optimisation and clustering methods: a method from district to regional scales. ECOS 2018 – The 31 st International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems, Guimarães, PT, 06-17 to 06-22 🍷
Mavromatidis Georgios/Orehounig Kristina/Carmeliet Jan
Approaches to increase PV electricity selfconsumption in urban areas through electrical storage and inter-building energy exchange. 31 st International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems (ECOS 2018), Guimaraes, PT, 06-17 to 06-21 🍷
Mavromatidis Georgios/Orehounig Kristina/Carmeliet Jan
Multi-stage optimal design of energy systems for urban districts. 7 th International Building Physics Conference (IBPC 2018), Syracuse, NY, US, 09-23 to 09-26 🍷
Murray Portia/Orehounig Kristina/Carmeliet Jan
Impact of Renewable Energy Potential on the Feasibility of Power to Hydrogen in Different Municipal Contexts. Ecos conference 2018, Guimaraes, PT, 06-17 to 06-21 🍷
Murray Portia/Orehounig Kristina/Carmeliet Jan
Power-to-gas for Decentralized Energy Systems: An Energy Hub Assessment. The 10 th International Conference on Applied Energy, Hong Kong, CN, 08-22 to 09-25 🍷
Orehounig Kristina
Speicher in Gebäude und Quartieren. Energiecluster Basel, FHNW Muttens, 03-13 🍷 ○
Orehounig Kristina
Umsetzung der Energiestrategie 2050: technische Regulierungen – Ansätze und Methoden für den Gebäudepark. Jahrestagung Energiecluster. «Herausforderungen der Digitalisierung für Wirtschaft & Gesellschaft», Zürich, 05-29 🍷 ○
Orehounig Kristina
Energy system and building retrofitting solutions: From building to district scale. SUUCCM conference, Berlin, DE, 09-13 to 09-14 🍷 ○
Orehounig Kristina
Ressourcenverbrauch minimieren, Resilienz maximieren. Ziele des SCCER FEEB&D. Brenet Statusseminar, Zürich, 09-05 to 09-07 🍷 ○
Orehounig Kristina/Thrapoulidis Emmanouil/Mavromatidis Georgios/Carmeliet Jan
A GIS based methodology to support multi-criteria decision making for the retrofitting process of residential buildings. International Building Physics Conference, Syracuse, New York, US, 09-24 to 09-26 🍷
Prasanna Ashreeta/Dorer Viktor
Using optimization to identify decarbonization pathways for cities. Informs annual meeting – The Institute for Operations Research and the Management Sciences, Phoenix, US, 11-04 to 11-07 🍷
Thrapoulidis Emmanouil/Georgios Mavromatidis/Kristina Orehounig/Jan Carmeliet
Emulation of energy optimization models via machine learning towards retrofitting existing buildings. Status Seminar 2018 – brenet, ETH Zurich, 09-06 to 09-07 🍷

Waibel Christoph/Mavromatidis Georgios/Bollinger Andrew/Evins Ralph/Carmeliet Jan

Sensitivity analysis on optimal placement of façade based photovoltaics. ECOS 2018 – The 31st International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems, Guimarães, PT, 06-17 to 06-22 🍷

Wang Danhong/Orehounig Kristina/Carmeliet Jan

A study of district heating systems with solar thermal based prosumers. 16th international symposium on district heating and cooling, Hamburg, DE, 09-09 to 09-12 🍷

Weber Robert

High Temperature Seasonal BTES for Effective Load Shifting and CO₂ Emission Reduction. EuroSun2018 – 12th International Conference on Solar Energy for Buildings and Industry, Rapperswil, 09-10 to 09-13 🍷

Materials Meet Life

Buhmann Matthias/Abt Dominik/Nolte Oliver/Betschart Patrick/Zumstein Valentin/Neu Thomas R./Stempel Sebastian/Albrich Werner/Ren Qun

Do sequencing-based microbiome analyses help with creating predictive biofilm models? Biofilms 8 conference 2018, Aarhus, DK, 05-26 to 05-29 🍷

Fessele Claudia/Zuber Flavia/Maniura Katharina/Ren Qun

Biodegradable and antibacterial active poly(4-hydroxybutyrate) films to prevent S. aureus infection. Biointerfaces International 2018, Zürich, 08-13 to 08-16 🍷

Fessele Claudia/Zuber Flavia/Maniura Katharina/Ren Qun

Biodegradable and antibacterial P4HB films to prevent and treat Staphylococcus aureus infection. Biofilm 8 Conference, Aarhus, DK, 05-27 to 05-29 🍷

Gontsarik Mark/Yaghmur Anan/Salentinig Stefan

Lipid-Based Nanocarriers for pH-Targeted Delivery of Antimicrobial Peptides. DRA Summer School, Copenhagen, DK, 08-24 🍷

Gontsarik Mark/Zabara Mahsa/Yaghmurb Anan/Rena Qun/Maniura Katharina/Salentinig Stefan

pH-Responsive Lipid-Based Nanocarriers for Antimicrobial Peptide Delivery. The Antimicrobial Resistance on Biomaterials Workshop, St. Gallen, 10-25 🍷

Gontsarik Mark/Zabara Mahsa/Yaghmur Anan/Ren Qun/Maniura Katharina/Salentinig Stefan

pH-Responsive Lipid-Based Nanocarriers for Antimicrobial Peptide Delivery. Biointerfaces International 2018, Zürich, 08-13 to 08-16 🍷

Gontsarik Mark/Mohammadtaheri Mahsa/Salentinig Stefan

pH-responsive self-assemblies of antimicrobial peptides with lipids. 4th European Summer School on Scattering Methods applied to Soft Condensed Matter, Bombannes, FR, 06-19 to 06-26 🍷

Griffoni Chiara/Sentürk Berna/Maniura-Weber Katharina/Rottmar Markus

Towards immunocompetent skin models: identification of a suitable co-culture medium. Biointerfaces International 2018, Zürich, 08-13 to 08-16 🍷

Gux Anne Géraldine

Drug delivery systems based on conjugated polymers and electrospun fibres. Center for applied biotechnology and molecular medicine (CABMM) – Scientific Seminar Series, Zürich, 11-09 🍷 ○

Gux Anne Géraldine/Poxson D.J./Fortunato G./Rossi R.M./Maniura-Weber K./Rottmar M.

New wound dressings to reduce fibrosis: Combining organic electronics and electrospinning. Swiss Medtech Day, Bern, 06-12 🍷

Gux Anne Géraldine/Poxson D.J./Fortunato G./Rossi R.M./Maniura-Weber K./Rottmar M.

Conjugated polymer systems for highly controlled proton delivery in antifibrosis therapy. Biointerfaces International 2018, Zürich, 08-13 to 08-16 🍷

Gux Anne Géraldine/Poxson David J./Fortunato Giuseppino/Simon Daniel T./Rossi René M./Maniura-Weber Katharina/Rottmar Markus

Organic electronic ion pumps for high precision proton delivery: A materials approach to reduce fibrosis. Gordon Research Seminar und Gordon Research Conference, Toscana, IT, 06-16 to 06-22 🍷

Maniura Katharina

Biosurfaces. HMZ Workshop on Alzheimer Diagnostics, Zürich, 02-07 🍷 ○

Maniura Katharina

Designing and understanding biointerfaces for successful application of materials in medicine. KSSG (Kantonsspital St. Gallen) Forschungsseminar "Experimentelle Medizin", St. Gallen, 02-16 🍷 ○

Maniura Katharina

Spraying cells and fibers from a can – the future of regenerative Medicine? Zurich Center for Integrative Human Physiology Seminar: Vision 2020 – a personal perspective, Zürich, 05-03 🍷 ○

Maniura Katharina

Bioinspired functionalisation of soft materials: materials and strategies. ESB (European Society for Biomaterials) Annual Conference, Maastricht, NL, 09-09 to 09-13 🍷 ○

Maniura Katharina

Biointerfaces in Medicine. Gordon Conference in Biointerface Science, Lucca, IT, 06-17 to 06-22 🍷 ○

<p>Maniura Katharina Biointerfaces in Medicine. Gordon Conference in Biointerface Science, Lucca, IT, 06-17 to 06-22 ▲ ○</p>
<p>Maniura Katharina Designing and understanding biointerfaces for successful application of materials in medicine. Antimicrobial biomaterials and biofilm infection, Tianjin, CN, 09-16 to 09-18 ● ○</p>
<p>Maniura Katharina Designing and understanding biointerfaces for successful application of materials in medicine. Antimicrobial Biomaterials and Biofilm Infection Symposium, Tianjin, CN, 09-16 to 09-18 ● ○</p>
<p>Maniura Katharina Session: Interactions in and with scaffolds. ESB (European Society for Biomaterials) Annual Conference, Maastricht, NL, 09-09 to 09-13 ▲ ○</p>
<p>Maniura Katharina Special Session 4: Evening Talks. Biointerfaces International 2018, Zürich, 08-13 to 08-16 ▲ ○</p>
<p>Maniura Katharina Special Session 4: Evening Talks. Biointerfaces International 2018, Zürich, 08-13 to 08-16 ▲ ○</p>
<p>Maniura Katharina Successful publishing. Biointerfaces International 2018, Zürich, 08-13 to 08-16 ● ○</p>
<p>Mertgen Anne-Sophie Developing a biomimetic blood-material interface by biochemical materials functionalization for cardiovascular implant applications. Center for applied biotechnology and molecular medicine (CABMM) – Scientific Seminar Series, Zürich, 10-26 ● ○</p>
<p>Mertgen Anne-Sophie/Guex Anne Géraldine/Fortunato Giuseppino/Rossi René M./Rottmar Markus/Maniura-Weber Katharina Creating adhesion Peptide gradients immobilised on Plasma Immersion ion Implantation-modified polymer substrates for endothelial cell interaction. GRC Biointerfaces Science Conference. Surfaces and Compartments in Biology and Medicine, Tuscany, IT, 06-17 to 06-22 ◆</p>
<p>Mertgen Anne-Sophie/Guex A. G./Fortunato G./Rossi R.M./Rottmar M./Maniura-Weber K. Development of immobilised peptide gradients by plasma immersion ion implantation for enhanced endothelial cell interaction. Biointerfaces International 2018, Zürich, 08-13 to 08-16 ◆</p>
<p>Müller Eike/Rottmar Markus/Fernandez Maria/Tobler Ursina/von Rechenberg Brigitte/Heuberger Manfred/Maniura Katharina ScarAvoid – A novel approach to treat chronic skin wounds and scar tissue formation. Swiss Medtech Day, Bern, 06-12 ◆</p>
<p>Müller Eike Understanding blood-material interaction to steer tissue response. Center for applied biotechnology and molecular medicine (CABMM) – Scientific Seminar Series, Zürich, 11-02 ● ○</p>
<p>Müller Eike/Fernandez Maria/Diaz Abad Sergio/Rottmar Markus Fabrication of porous P4HB scaffolds to treat chronic skin wounds. Biointerfaces International 2018, Zürich, 08-13 to 08-16 ◆</p>
<p>Müller Eike/Cihova Martina/Maniura Katharina/Löffler Jörg F./Rottmar Markus Potential of Metallic Glasses for Application in Blood-Contacting Devices. Biointerfaces International 2018, Zürich, 08-13 to 08-16 ◆</p>
<p>Qin Xiao-Hua/Wang Xiaopu/Rottmar Markus/Nelson Bradley/Maniura-Weber Katharina Designing synthetic photo-clickable hydrogels to direct cell fate. 24th Annual Meeting of the SSB+RM: Bioinspired Materials, AMI, Fribourg, 06-05 to 06-07 ●</p>
<p>Qin Xiao-Hua/Wang X./Rottmar M./Nelson B./Maniura-Weber K. Spatio-temporal control of cell invasion in 3D microenvironments. Biointerfaces International 2018, Zürich, 08-13 to 08-16 ◆</p>
<p>Ren Qun Antimicrobial Resistance on Biomaterials, St. Gallen, 10-25 ▲</p>
<p>Ren Qun Can material stiffness influence bacterial adhesion? From both bulk material and surface properties. Antimicrobial biomaterials and biofilm infection, Tianjin, CN, 09-16 to 09-18 ●</p>
<p>Ren Qun/Buhmann Matthias/Abt Dominik/Maniura Katharina Antimicrobial coatings: the discrepancy of their effectiveness in the laboratory and in the application. Workshop Meet the Expert, Olten, 03-13 ● ○</p>
<p>Ren Qun/Ertem Elif/Gutt Beatrice/Zuber Flavia/Meftid Selma/Formentin Kitty/Stellacci Francesco Core-shell silver nanoparticles in endodontic disinfection solutions enable long-term antimicrobial effect. Biointerfaces International 2018, Zürich, 08-13 to 08-16 ◆</p>
<p>Ren Qun/Gutt B./Hauser-Gerspach I./Kardas P./Stübinger S./Astasov-Frauenhoffer M. Beneficial oral biofilms as smart bioactive interfaces. Biofilms 8 Conference, Aarhus, DK, 05-27 to 05-29 ◆</p>
<p>Rottmar Markus Understanding and controlling cell-material interactions by material design. Center for applied biotechnology and molecular medicine (CABMM) – Scientific Seminar Series, Zürich, 10-19 ● ○</p>

<p>Rottmar Markus Biomaterials. MUS.I.C Summerschool "Tissue Engineering: A Road Trip from Bench to Bedside", Zürich, 06-27 to 06-29 🍷 ○</p>
<p>Salenting Stefan An introduction to SAXS. Colloquium of the Graduate Program in Chemistry and Materials Sciences, University of Pernambuco, Recife, BR, 05-23 🍷 ○</p>
<p>Rottmar Markus/Müller Eike/Cihova Martina/Maniura Katharina/Löffler Jörg F. Controlling blood-material interaction by tuning the composition of amorphous metals. 29th Annual Meeting of the European Society for Biomaterials, Maastricht, NL, 09-09 to 09-13 🍷</p>
<p>Rottmar Markus/Müller Eike/Guimond Stefanie/Tobler Ursina/Stephan Marc/Berner Simon/Maniura Katharina An advanced in vitro model for ceramic dental implant surface development. Meet the Expert – Materials and Surface Technology for Implants, Olten, 03-13 🍷 ○</p>
<p>Rottmar Markus/Müller Eike/Guimond Stefanie/Tobler Ursina/Stephan Marc/Berner Simon/Maniura Katharina An advanced in vitro osseointegration model for implant surface development. Swiss Medtech Day, Bern, 06-12 🍷 ○</p>
<p>Rottmar Markus/Müller Eike/Guimond Stefanie/Tobler Ursina/Stephan Marc/Berner Simon/Maniura Katharina A predictive in vitro osseointegration model for ceramic dental implant surface development. Orthomanufacture 2018, Yverdon les bains, 06-20 to 06-21 🍷 ○</p>
<p>Salenting Stefan Food and Digestion inspired Supramolecular Drug Delivery Materials. Lunch Seminar Soft Matter and Biological Physics, Munich, DE, 12-11 🍷 ○</p>
<p>Salenting Stefan Food inspired nanomaterials for drug delivery. University of São Paulo, Institute of Physics at USP, São Paulo, BR, 05-28 🍷 ○</p>
<p>Salenting Stefan Functional Lipid Structures for the Encapsulation of Bioactive Molecules. 7. Workshop der Forschungsinitiative SUBITEX, St. Gallen, 03-19 🍷</p>
<p>Salenting Stefan Molecular Engineering of Functional Biointerfaces. Bio-X: The exciting world of biology seen by X-rays, St. Gallen, 03-16 🍷</p>
<p>Salenting Stefan SAXS guided supramolecular Engineering of nanostructured drug delivery materials. Laboratorio Nacional de Luz Síncrotron, Campinas, BR, 05-25 🍷 ○</p>
<p>Salenting Stefan Scattering methods applied to biological Systems – some examples. Colloquium of the Graduate Program in Chemistry and Materials Sciences, University of Pernambuco, Recife, BR, 05-30 🍷 ○</p>
<p>Salenting Stefan Supramolecular Engineering for Functional Food Materials. Seminar of the Uni Fribourg, Fribourg, 04-18 🍷 ○</p>
<p>Salenting Stefan Food- and digestion-inspired drug delivery systems. Biointerfaces International 2018, Zürich, 08-13 to 08-16 🍷 ○</p>
<p>Salenting Stefan Lipid nanocarriers for antimicrobial peptides. Spiez Convergence Workshop, Spiez, 09-01 to 09-14 🍷 ○</p>
<p>Salenting Stefan Molecular Engineering for Antimicrobial Nanomaterials. STINT Workshop, Vindeln, SE, 07-01 to 07-05 🍷 ○</p>
<p>Salenting Stefan Supramolecular Engineering of Functional Biointerfaces. MRS Spring Meeting, Phoenix, US, 04-02 to 04-06 🍷 ○</p>
<p>Sentürk Berna/Fessele Claudia/von Rechenberg Brigitte/von Hahn Friedrich/Teslenko Alexander/Rottmar Markus The TDAskin concept – a holistic wound healing approach for chronic wounds. Swiss Medtech Day, Bern, 06-12 🍷</p>
<p>Sentürk Berna/Fessele C./von Rechenberg B./Hahn F./Rottmar M. Transdermal application of curcumin to treat bacterial infection in a 3D skin model. Biointerfaces International 2018, Zürich, 08-13 to 08-16 🍷</p>
<p>Sentürk Berna/Fessele C./von Rechenberg, B./Hahn, F./Rottmar, M. Transdermal application of curcumin to treat bacterial infection in a 3D Skin model. 24th Annual Meeting of the SSB+RM: Bioinspired Materials, AMI, Fribourg, 06-05 to 06-07 🍷</p>
<p>Sentürk Berna/Fessele Claudia/Teslenko Alexander/von Rechenberg Brigitte/von Hahn Friedrich/Rottmar Markus Treatment of bacterial infection in a 3D skin model by transdermal application of curcumin. 29th Annual Meeting of the European Society for Biomaterials, Maastricht, NL, 09-09 to 09-13 🍷</p>

Straub Hervé/Zhang Haijing/Rossi René/Maniura-Weber Katharina/Ren Qun

A microfluidics-based approach to investigate the factors influencing the initial phase of bacterial adhesion on surfaces. Biointerfaces International 2018, Zürich, 08-13 to 08-16 ◆

Valentin Jules

Better treatment through better understanding of Pseudomonas aeruginosa biofilms. The Antimicrobial Resistance on Biomaterials Workshop, St. Gallen, 10-25 ●

Valentin Jules/Ren Qun/Generelli Silvia/Gao Hui

Surface functionalization with anti-microbial peptides. Meet the Expert. Materials and Surface Technology for Implants, Olten, 03-13 ◆

Valentin Jules/Buhmann Matthias/van der Mei Henny/Ren Qun

Better treatment through better understanding of antimicrobial resistance of biofilm. The 7th Thesinge Biofilm Conference, Groningen, NL, 10-01 to 10-02 ◆

Valentin Jules/Buhmann Matthias/van der Mei Henny/Ren Qun

Better Treatment through better understanding of antimicrobial resistance of biofilm. NRP72 Meeting 2018, Nottwil, 04-18 to 04-19 ◆

Valentin Jules/Buhmann Matthias/van der Mei Henny/Ren Qun

Identification of genes involved in biofilm specific resistance against antimicrobials in Pseudomonas aeruginosa. Biofilms 8 Conference, Aarhus, DK, 05-27 to 05-29 ●

Weishaupt Ramon/Heuberger L./Siqueira G./Gutt B./Zimmermann T./Maniura-Weber K./Salentinig S.

Nanofibrillated Cellulose – Nisin Self-assembly for the Design of Advanced Antimicrobial Materials – a SAXS Study. Biointerfaces International 2018, Zürich, 08-13 to 08-16 ◆

Zabara Mahsa

Antimicrobial peptide/glycerol monooleate self-assemblies. ECIS (European Colloid and Interface Science Conference) 2018, Ljubljana, SI, 09-02 to 09-07 ●

Zabara Mahsa/Senturk Berna/Gontsarik Mark/Ren Qun/Maniura-Weber Katharina/Salentinig Stefan

Lipid-based antibacterial nanostructures. Biointerfaces International 2018, Zürich, 08-13 to 08-16 ◆

Zakeri Siavashani Abdollah/Mohammadi, J./Sadeghi, B./Senturk, B./Rottmar, M./Maniura-Weber, K.

Development of silk scaffolds with immunomodulatory capacity. 24th Annual Meeting of the SSB+RM, Fribourg, 06-05 to 06-07 ◆

Annaheim Simon/Psikuta Agnes/Eggenberger Patrick/Fontana Piero/Rossi René M

Modelling approaches for physiological evaluation and prediction of physiological responses. 12th International Meeting on Thermal Manikin and Modelling (12I3M), St. Gallen, 08-29 to 08-31 ●

Annaheim Simon/Eggenberger Patrick/Bürgisser Michael/Kemp Shelly/Camenzind Martin/Rossi René M

Non-Invasive Heat Strain Detection for Passive and Active Heat Exposures. 8th European Conference on Protective Clothing (ECPC), Porto, PT, 05-07 to 05-09 ●

Annaheim Simon

12th International Meeting on Thermal Manikin and Modelling (12I3M), St. Gallen, 08-29 to 08-31 ▲

Boesel Luciano

Annual Meeting of the Biomedical Photonics Network, St. Gallen, 12-11 ■

Brunelli Marzia

Nanoparticles embedded in electrospun fibers for psoriasis treatment. Nanotechnology NN18, Thessaloniki, GR, 07-02 to 07-06 ●

Brunelli Marzia

PDMS/PVDF-HFP core-sheath fibers with piezoelectric properties for stimulation of cells. European Society of Biomaterials, ESB 2018, Maastricht, NL, 09-09 to 09-13 ●

Defraeye Thijs

Drying of soft cellular foods insights from multiscale modeling and imaging. Physics of Drying Conference, Paris, FR, 11-05 to 11-07 ● ○

Defraeye Thijs

Drying of Soft Cellular Foods Multiscale and Conjugate Modeling Perspectives. COMSOL Multiphysics Conference, Lausanne, 10-22 to 10-24 ● ○

Defraeye Thijs

Towards integral optimization of cooling processes and packaging in the citrus cold chain. 10th Citrus Research Symposium, South Africa, ZA, 08-19 to 08-22 ● ○

Fojtlin Milos/Psikuta Agnes/Fišer Jan/Pokorný Jan/Toma Róbert/Jícha Miroslav

Effects of seated posture and automotive seat on human thermal response. 12th International Manikin and Modelling Meeting, St. Gallen, 08-29 to 08-31 ●

Fortunato Giuseppino

Surface integrated nanofiber networks for endothelialized stretchable blood-material interfaces. 7th Korean-Swiss Science Day, Assistive Technologies for Ageing Society, Zurich, 11-15 ● ○

Fortunato Giuseppino

Cell-laden electrospun hybrid membranes to mimic the native blood barrier. 3F-Talks: Functional Fibres and Films: Medical Fibers and Textiles, Aachen, DE, 04-12 to 11-13 ● ○

<p>Fortunato Giuseppino/Weidenbacher Lukas/Abrishamkar Afshin/Guex Anne Géraldine/Brunelli, Marzia/Rottmar Markus/Maniura-Weber Katharina/Rossi René Electrostatic Spinning – Spraying for Cell-Laden Hybrid Membranes Mimicking Native Blood Barrier. Fiber Society Spring Conference, Tokio, JP, 06-12 to 06-14 ●</p>
<p>Guan Manhao/Annaheim Simon/Li Jun/Psikuta Agnes/Camenzind Martin/Mandal Sumit/Rossi René Thermo-physiology and thermal protection of clothed human body with continuous sweating under radiant heat: a sweating manikin study. 12th International Manikin and Modelling Meeting, St. Gallen, 08-29 to 08-31 ●</p>
<p>Joshi Ankit/Psikuta Agnes/Bueno Marie-Ange/Annaheim Simon/Rossi René Analysis of heat transfer from human body and effect of clothing surface on heat transfer mechanism. COMSOL Conference 2018 Lausanne, Lausanne, 10-22 to 10-24 ●</p>
<p>Joshi Ankit/Psikuta Agnes/Bueno Marie-Ange/Annaheim Simon/Rossi René Mathematical formulation of sensible heat transfer in the spatially heterogeneous skin-clothing-environment system. 12th International Manikin and Modelling Meeting, St. Gallen, 08-29 to 08-31 ●</p>
<p>Keirouz Antonios/G. Fortunato Giuseppino/Callanan Anthony/Radacsi Norbert Needleless electrospinning for elastic PGS/PVP scaffolds as skin substitutes. Electrospin2018 – 5TH International Conference on Electrospinning, Stellenbosch, ZA, 01-16 to 01-18 ◆</p>
<p>Luisier Nicolas/Toncelli Claudio/Rossi René/Fortunato Giuseppino Colloid-electrospinning: release rate of volatiles from microcapsules-in-fibers morphology. SCS Fall Meeting , EPFL Lausanne, 09-07 ◆</p>
<p>Mandal Sumit/Camenzind Martin/Annaheim Simon/Rossi René M Categorization of Fabrics Used in Firefighters' Clothing based on their Thermal Protective and Thermoregulation Performances. European Conference on Protective Clothing – 2018, Porto, PT, 05-07 to 05-09 ●</p>
<p>Mandal Sumit/Annaheim Simon/Greve Jemma/Camenzind Martin/Rossi/M René Modeling for Predicting the Thermal Protective and Thermo-physiological Comfort Performances of Fabrics. 12th International Manikin and Modelling Meeting, St. Gallen, 08-29 to 08-31 ●</p>
<p>Mert Emel/Psikuta Agnes/Joshi Ankit/Arévalo Marlène/Charbonnier Caecilia/Luible-Bär Christiane/Annaheim Simon/Rossi René The distribution of air gap thickness and the contact area during Alpine skiing. 9th 3DBODY.TECH Conference and Expo, Lugano, 10-16 to 10-17 ●</p>
<p>Morel Alexandre/Domaschke Sebastian/Kumaran Varun Urundolil/Ehret Alexander Edmund/Rossi René Michel/Fortunato Giuseppino. Understanding the Mechanical Properties of Electrospun Networks: Analysis, Tayloring and Simulation. Biomaterials 2018, Berlin, DE, 03-05 to 03-06 ●</p>
<p>Nedjari Salima/Gugutkov Dencho/Awaja, Firas/Fortunato Giuseppino/Rossi René Michel/Altankov George 3D Honeycomb patterned fibrinogen based nanofibers induce osteogenic differentiation of mesenchymal stem cells. 24th Annual meeting of the Swiss Society for Biomaterials and Regenerative Medicine SSBRM, Fribourg, 06-06 to 06-07 ◆</p>
<p>Nedjari Salima/Fortunato Giuseppino/Rossi René Michel Architected Electrospun Living Construct For Vascular Tissue Engineering. 2nd Conference for Early Stage Researchers in Polymer Science, Polymar, Athens, GR, 10-08 to 10-12 ●</p>
<p>Prawiranto Kevin/Defraeye Thijs/Derome Dominique/Carmeliet Jan Insights into the dehydration of soft cellular food using multiscale modeling. WFSC Research Symposium 2018, Zurich, 11-08 ◆</p>
<p>Prawiranto Kevin/Defraeye Thijs/Derome Dominique/Carmeliet Jan Insights into fruit tissue dehydration using a microscale hygro-mechanical modeling. Engineering Mechanics Institute Conference 2018, MIT, Cambridge, US, 05-31 to 06-01 ●</p>
<p>Psikuta Agnes 9th 3DBODY.TECH Conference and Expo, Lugano, 10-16 to 10-17 ▲</p>
<p>Psikuta Agnes 12th International Manikin and Modelling Meeting, St. Gallen, 08-29 to 08-31 ▲</p>
<p>Psikuta Agnes/Annaheim Simon/Rossi René Comprehensive modelling of human-clothing-environment system for application in apparel, indoor environment, automotive and urban climate fields. Swiss Inter- and Transdisciplinarity Day 2018. Inter- and Transdisciplinarity in a Digital World, Lausanne, 11-15 ◆</p>
<p>Psikuta Agnes/Joshi Ankit/Mert Emel/Koelblen Barbara/Annaheim Simon/Rossi René Human-clothing-environment interaction model. 12th International Manikin and Modelling Meeting, St. Gallen, 08-29 to 08-31 ●○</p>
<p>Psikuta Agnes/Joshi Ankit/Mert Emel/Koelblen Barbara/Fojtlin Miloš/Xu Jingxian/Annaheim Simon/Rossi René Comprehensive model of human-clothing-environment system. 12th International Manikin and Modelling Meeting, St. Gallen, 08-29 to 08-31 ●</p>

Psikuta Agnes/Short Rachel/Annaheim Simon Relevance of the WBGT Heat Stress Index for assessment of human thermal strain. 7 th International Conference on the Physiology and Pharmacology of Temperature Regulation (PPTR 2018), Split, HR, 10-07 to 10-12 🍷
Psikuta Agnes/Vetch Ann-Christin/Annaheim Simon Organisation Committee. 12 th International Manikin and Modelling Meeting, St. Gallen, 08-29 to 08-31 ■
Rossi René Körper- und Hautmodelle zur Beurteilung des thermischen Komforts. Symposium Thermische Behaglichkeit, Aachen, DE, 11-14 🍷 ○
Rossi René Wearables, body models and quantified self. Topical Day Digitalisierung, Dübendorf, 03-28 🍷 ○
Rossi René Protection against hot steam injuries: how does steam penetrate the human skin? 8 th European Conference on Protective Clothing, Porto, PT, 05-07 to 05-09 🍷 ○
Rossi René Fiber Society Conference, Davis CA, US, 10-29 to 10-31 ▲ ○
Rossi René 8 th European Conference on Protective Clothing, Porto, PT, 05-07 to 05-09 ▲ ○
Rossi René/Sumit Mandal/Martin Camenzind/Simon Annaheim Characterizing Thermal Protective and Thermophysiological. Comfort Performance of Fabrics Used in Firefighters' Clothing Using 2D Intermediate Tests. Fiber Society Conference, Davis CA, US, 10-29 to 10-31 🍷 ○
Tagliavini Giorgia/Defraeye Thijs/Carmeliet Jan Mango quality evolution inside cold chains by multiphysics modeling. WFSC 2018 – World Food System Center Symposium, Zurich, 11-08 ◆
Tagliavini Giorgia/Defraeye Thijs/Carmeliet Jan Convective cooling of elliptical, anisotropic, heat-sensitive products: a case study for mango fruit. ACEX 2018 – Experimental & Computational Fluid Dynamics, Amsterdam, NL, 07-01 to 07-05 🍷
Toncelli Claudio/Armagan Efe/Thiyagarajan Shankar/Boesel Luciano/Rossi M. René Structural tuning of carbon nanodots and their potential in clinical diagnostics. NanoBio_International Conference on Nanotechnologies and Nanobiosciences, Heraklion, GR, 09-24 to 09-28 🍷
Vesela Stephanie /Psikuta Agnes/Frjins Arjan Determination of the local evaporative resistances of two typical office clothing ensembles and the effect of air speed and body movement. 12 th International Manikin and Modelling Meeting, St. Gallen, 08-29 to 08-31 🍷
Xu Jingxian/Psikuta Agnes/Li Jun/Annaheim Simon/Rossi René 2D and 3D simulation on thermal flow around the human body. COMSOL Conference 2018 Lausanne, Lausanne, 10-22 to 10-24 🍷
Xu Jingxian/Psikuta Agnes/Li Jun/Annaheim Simon/Rossi René Influence of human body geometry simplification on local heat transfer. 12 th International Manikin and Modelling Meeting, St. Gallen, 08-29 to 08-31 🍷
Balogh Zoltan Crystallinity and crystallite size determination of recrystallized nanocellulose (oral). SWISS CRYSTALLOGRAPHIC SOCIETY annual meeting (SGK), 2018, Villigen PSI, 09-12 🍷
Balogh Zoltan Analysis of functional thin films via in plane diffraction method. Epdic 16, Edinburgh, GB, 07-02 to 07-05 🍷
Balogh Zoltan Chemical reaction chamber for surface treatments. Epdic 16, Edinburgh, GB, 07-02 to 07-05 ◆
Balogh Zoltan Growth kinetics of reaction layers in solid-gas reactions. Swiss Nano Convention, Zürich, 06-06 to 06-07 ◆
Balogh Zoltan In plane and asymmetric XRD investigation of magnetic thin films, 26 th Ann. Meeting of DGK, Essen, DE, 03-05 to 03-08 ◆
Balogh Zoltan In situ XRD studies on the hydrogenation of Ti thin films. 26 th Ann. Meeting of DGK, Essen, DE, 03-05 to 03-08 🍷
Dolabella Simone NEMS for sensing applications: structural understanding by combining Scanning X-ray nano-Diffraction Imaging and micro-Raman methods. SGK-meeting-2018, Villigen, PSI, 09-12 ◆
Dolabella Simone NEMS for sensing applications: structural understanding by combining Scanning X-ray nano-Diffraction Imaging and micro-Raman methods. EPDIC 16, Edinburgh, GB, 07-02 to 07-05 ◆
Iranpour Neda Microfluidic-SAXS for the Study of Nanoparticles Agglomeration Kinetics in Biomimetic Environment. BIO-X Conference, St. Gallen, 03-16 ◆

Iranpour Neda

Novel quantitative method based on small angle X-ray scattering for in-situ understanding of nanoparticles agglomeration kinetics. SWISS CRYSTALLOGRAPHIC SOCIETY annual meeting (SGK), PSI, Villigen, 09-12 ◆

Iranpour Neda

Understanding Nanoparticles Agglomeration in Biological Environment. Biointerfaces 2018, Zürich, 08-13 to 08-16 ◆

Kolokytha Selina

On-Belt Tomosynthesis: Low-cost three dimensional X-ray tomography of baggage for security inspection. 2018 IEEE Nuclear Science Symposium and Medical Imaging Conference, Sydney, AU, 11-10 to 11-17 ◆

Maurya Anjani

Decoding the folded chains and nanostructures inside electrospun nanofibers by SAXS and WAXS. SCS Fall meeting-2018, Lausanne, EPFL, 09-07 ●

Maurya Anjani

Study the effect of nanofiber fabrication processes into the modification of internal structure at nanoscale. SGK-meeting-2018, Villigen, PSI, 09-12 ◆

Maurya Anjani K.

X-ray Analytics and the challenges in the merging fields of materials science, biology and medicine. BIO-X Conference, St. Gallen, 03-16 ◆

Maurya Anjani

Structural Insights into Semicrystalline States of Electrospun Nanofibers. EXCITE Summer School, Zürich, ETH, 09-03 to 09-14 ◆

Neels Antonia

Advanced X-ray Analytics for Innovative Coating Technologies. Annual Meeting of the Biomedical Photonics Network (BMPN), St. Gallen, 12-11 ● ○

Neels Antonia

Advanced X-ray Analytics for Innovative Coating Technologies. SYMPOSIUM ON OCLA 2018, Buchs, 04-12 ● ○

Neels Antonia

X-ray Analytics and the challenges in the merging fields of materials science, biology and medicine. BIO-X Conference, St. Gallen, 03-16 ●

Neels Antonia

Fehleranalysen an Implantaten: Was können wir für die Zuverlässigkeit lernen? DVM: Zuverlässigkeit von Implantaten und Biostrukturen, Berlin, DE, 10-19 to 10-20 ●

Neels Antonia

X-ray analytical methods to understand polymer functionality. THERMOSETTING RESINS 2018; <https://netcomposites.com/events/2018/thermosetting-resins-2018/>, Berlin, DE, 09-25 to 07-27 ●

Neels Antonia

X-ray diffraction and scattering methods for the study of molecular systems dynamics. SupraMedChem@Balkans.Net, Albena, BG, 08-30 to 09-03 ● ○

Sadeghpour Amin

Biomaterials as Seen by Small Angle X-ray Scattering. Department for Biomaterials, University of Bayreuth, Bayreuth, DE, 02-19 ● ○

Sadeghpour Amin

Understanding Early Stages of Lipid Crystallisation by SAXS. BIO-X Conference, St. Gallen, 03-16 ●

Sadeghpour Amin

From Semi-crystalline to Amorphous Systems: the Frontier in SAXS Data Analysis. Bruker User Meeting, Dresden, DE, 09-24 to 09-26 ● ○

Sadeghpour Amin

Structural Insights into Semicrystalline States of Electrospun Nanofibers by X-ray Scattering. EPDIC 16, Edinburgh, GB, 07-02 to 07-05 ◆

Sadeghpour Amin

Structure and Dynamics of Lipid Interfaces upon Interactions of Flavonoids Visualised by X-ray Scattering. Biointerfaces 2018, Zürich, 08-14 to 08-16 ◆

Sadeghpour Amin

The Semi-crystalline Structural Features Revealed by Diffractions at Small Angle Regime. Swiss Crystallographic Society Meeting 2018, PSI, Villigen, 09-11 to 09-04 ●

Bacani Mikro/Penedo M./Fernandez-Peña S./Marioni M. A./Scholder O. /Gariglio S./Triscone J.-M./Hug H.J.

Novel piezoresponse force microscopy technique applied to Pb_{0.8}Sr_{0.2}TiO₃ thin films. 3rd Functional Oxide Thin Films for Advanced Energy and Information Technology Conference, Rome, IT, 07-05 to 07-08 ◆

Bacani Mikro/Mandru A.-O./Zhao X./Ahmed A.S./Meng K.-Y./Yang, F.Y./Hug H.J.

Skyrmion formation in a SrRuO₃-SrIrO₃ epitaxial bilayer. ICM, San Francisco, US, 07-15 to 07-20 ●

Bacani Mikro/Mandru A.-O./Zhao X./Ahmed A.S./Meng K.-Y./Yang, F.Y./Hug H.J.

Skyrmion formation in a SrRuO₃-SrIrO₃ epitaxial bilayer. SPS, Geneva, 08-28 to 07-31 ●

Baljozovic Milos/Mairena Anaïs/Parchau Manfred/Kawecki Maciej/Bernard Laetitia/Wäckerlin Christian/Ernst Karl-Heinz

Unravelling the role of transiently produced hydrogen in on-surface chemistry. 3rd International Meeting Materials Science for Energy related Applications, Belgrade, CS, 09-25 to 09-26 🍷

Baljozovic Milos

3rd International Meeting on Materials Science for Energy Related Applications, Belgrade, CS, 09-25 to 09-26 ■

Bernard Laetitia/Maciej Kawecki/Rowena Crockett/Madeleine Ramstedt

Molecular differentiation: from simple monosaccharides to complex bacteria membranes. Empa Peer Review, Empa St Gallen, 10-22 to 10-24 ◆

Crockett Rowena

Swiss Tribology Technical Meeting, Empa Akademie, 11-16 ■

Crockett Rowena

Friction and Wear of Kinetic Art. International Nanotribology Forum, Goa, IN, 01-08 to 01-12 🍷○

Ernst Karl-Heinz

Chirality in flatland: intermolecular recognition, spin filtering and molecular machines at surfaces. Chemistry Seminar, NYU Chemistry Department, New York University, New York, US, 05-31 🍷○

Ernst Karl-Heinz

Chirality in flatland: intermolecular recognition, spin filtering and molecular machines at surfaces. Univerzita Palackého v Olomouci, Chemistry Seminar, Olomouc, CZ, 10-10 🍷○

Ernst Karl-Heinz

Chirality in flatland: intermolecular recognition, spin filtering and molecular machines at surfaces. EaStCHEM Colloquium, University of St. Andrews, St. Andrews, Fife, Scotland, GB, 04-04 🍷○

Ernst Karl-Heinz

Chirality in flatland: intermolecular recognition, spin filtering and molecular machines at surfaces. Special Seminar, J. Heyrovsky Institute of Physical Chemistry, Czech, CZ, 09-13 🍷○

Ernst Karl-Heinz

Chirality in flatland: Single-molecule manipulation, spin filtering and molecular machines at surfaces. Department of Chemistry Seminar, Berkeley, CA, University of California Berkeley, US, 06-15 🍷○

Ernst Karl-Heinz

Helical molecules and surface science: On-surface chemistry and physics of helicenes. Institute of Chemistry Seminar, Czech Academy of Sciences, Prague, CZ, 12-12 🍷○

Ernst Karl-Heinz

Helical molecules in flatland: chiral recognition, spin filtering and molecular machines. Molecular Foundry Seminar, Lawrence Berkeley Laboratory, Berkeley, US, 06-13 🍷○

Ernst Karl-Heinz

Helical molecules in flatland: chiral recognition, spin filtering and molecular machines. Physik Seminar, Peter Grünberg Institut, Forschungszentrum Jülic, DE, 06-26 🍷○

Ernst Karl-Heinz

Helical Molecules in Flatland: Chiral Recognition, Spin Filtering and Molecular Machines. Center of Soft Nanoscience Inauguration Workshop, U Münster, Münster, DE, 11-13 🍷○

Ernst Karl-Heinz

Helical molecules in flatland: chiral recognition, spin-filtering and molecular machines. Astronomy and Physics Colloquium, Louisiana State University, Baton Rouge, Louisiana, US, 2019-03-22 🍷○

Ernst Karl-Heinz

Helical molecules in flatland: stereoselective chemistry, spin filtering and molecular machines. Physikolloquium J. Kepler Universität, Linz, AT, 10-31 🍷○

Ernst Karl-Heinz

Racemate or conglomerate crystals: Tales from Alfred Werner, Otto Wallach, Theodor Liebisch and Arnold Sommerfeld. International Workshop on Nanomaterials and Nanodevices, Lanzhou, CN, 07-05 🍷○

Ernst Karl-Heinz

Welt im Spiegel: Von der Geburt der Molekülstruktur zu Molekularen Maschinen. Berliner Physik Kolloquium, Deutsche Physikalische Gesellschaft, Berlin, DE, 03-12 🍷○

Ernst Karl-Heinz

World in a Mirror 1. FZU Tutorial, Physics Institute Czech Academy of Science, Prague, CZ, 10-08 🍷○

Ernst Karl-Heinz

World in a Mirror II: Chirality in the Physical Sciences. FZU Tutorial Seminar, Physics Institute Czech Academy of Science, Prague, CZ, 10-15 🍷○

Ernst Karl-Heinz

World in a Mirror III: Parity Violation and Optical Activity. FZU Tutorial Seminar, Physics Institute Czech Academy of Science, Prague, CZ, 11-05 🍷○

Ernst Karl-Heinz

World in a Mirror: Chirality and the emergence of molecular structure. Department of Chemistry Seminar, University of California Berkeley, Berkeley, US, 06-15 🍷○

Ernst Karl-Heinz

Chiral recognition among helical non-planar aromatic hydrocarbons on metal surfaces. 255th ACS Meeting, New Orleans, US, 03-18 to 03-22 ● ○

Ernst Karl-Heinz

Cooperate chiral symmetry breaking in two dimensions. Chiral Symmetry Breaking at Molecular Level Solvay Workshop, Brussels, BE, 11-28 to 11-29 ● ○

Ernst Karl-Heinz

Driving molecular machines by inelastic electron tunneling. International Workshop on Nanomaterials and Nanodevices, Beijing, CN, 07-02 to 07-03 ● ○

Ernst Karl-Heinz

Helical molecules in flatland: chiral recognition, spin filtering and molecular machines. ICN+T, Brno, CZ, 07-22 to 07-27 ● ○

Ernst Karl-Heinz

Helical molecules in flatland: chiral recognition, spin-filtering and molecular machines. 10th Singapore International Chemistry Conference (SICC10), Singapore, SG, 12-16 to 12-19 ● ○

Ernst Karl-Heinz

Molecular surface chirality: From electron spin filtering to molecular machines. Nanocon, Brno, CZ, 10-17 to 10-19 ● ○

Ernst Karl-Heinz

Self-assembly and on-surface chemistry: bis-, tris- and monohelices. JACC 2018: Journées André Collet e la Chiralité, Noirmoutier, FR, 09-24 to 09-27 ● ○

Ernst Karl-Heinz

Single molecule surface dynamics induced by inelastic electron tunneling. Stereodynamics 2018, Arosa, 09-02 to 09-07 ● ○

Ernst Karl-Heinz

Spin filtering by monolayers of helical molecules. SSNS'18, Furano, JP, 01-10 to 01-14 ● ○

Ernst Karl-Heinz

Unidirectional motion of molecules on surfaces powered by electron scattering. Molecules, Materials, Devices and Systems, New York, US, 05-28 to 05-30 ● ○

Ernst Karl-Heinz

34th Annual Meeting of the Swiss Working Group on Surface and Interfaces (SAOG) , Fribourg, 01-31 to 02-01 ■

Ernst Karl-Heinz/Srivastava, Gitika/Parschau Manfred/Zoppi Laura/Stacko Peter/Feringa Ben

Driving molecular machines with electrons on surfaces: walkers and nanocars. Symposium of Atomic Physics and Surfaces (SASP 2018), Obergurgl, AT, 02-11 to 02-16 ●

Ernst Karl-Heinz/Srivastava, Gitika/Parschau Manfred/Zoppi Laura/Stacko Peter/Feringa Ben

Molecular machines driven with electrons on surfaces: walkers and nanocars. 3 S'18 Conference, St. Christoph, AT, 02-25 to 03-02 ●

Fischer Maria/Scopece Daniele/Pignedoli Carlo A./Trant Mathis/Thorwarth Kerstin/Passerone Daniele/Hug Hans Josef

Vacancies & Thermodynamics in Al-O/Si-N. PhD-Seminar des Departments Materials Meet Life, St. Gallen, 01-24 ● ○

Fischer Maria/Trant Mathis/Scopece Daniele/Pignedoli Carlo A./Thorwarth Kerstin/Passerone Daniele/Hug Hans Josef

Vacancies & Thermodynamics in Al-O/Si-N. 16th PSE, Garmisch-Partenkirchen, DE, 09-17 to 09-21 ●

Fischer Maria/Trant Mathis/Scopece Daniele/Pignedoli Carlo A./Thorwarth Kerstin/Passerone Daniele/Hug Hans Josef

Vacancies & Thermodynamics in Al-O/Si-N. 45th ICMCTF, San Diego, CA, USA, US, 04-23 to 04-27 ●

Fischer Maria/Trant Mathis/Scopece Daniele/Pignedoli Carlo A./Thorwarth Kerstin/Passerone Daniele/Hug Hans Josef

Vacancies in Al-Si/O-N Crystallites. 45th ICMCTF, San Diego, CA, USA, US, 04-23 to 04-27 ◆

Fischer Maria/Scopece Daniele/Pignedoli Carlo A./Trant Mathis/Thorwarth Kerstin/Passerone Daniele/Hug Hans Josef

Vacancies & Thermodynamics in Al-O/Si-N. PhD-Seminar des Departments Materials Meet Life, St. Gallen, 01-24 ● ○

Fischer Maria/Trant Mathis/Scopece Daniele/Pignedoli Carlo A./Thorwarth Kerstin/Passerone Daniele/Hug Hans Josef

Vacancies & Thermodynamics in Al-O/Si-N. 45th ICMCTF, San Diego, CA, USA, US, 04-23 to 04-27 ●

Fischer Maria/Trant Mathis/Scopece Daniele/Pignedoli Carlo A./Thorwarth Kerstin/Passerone Daniele/Hug Hans Josef

Vacancies & Thermodynamics in Al-O/Si-N. 16th PSE, Garmisch-Partenkirchen, DE, 09-17 to 09-21 ●

Fischer Maria/Trant Mathis/Scopece Daniele/Pignedoli Carlo A./Thorwarth Kerstin/Passerone Daniele/Hug Hans Josef

Vacancies in Al-Si/O-N Crystallites. 45th ICMCTF, San Diego, CA, USA, US, 04-23 to 04-27 ◆

Ganesan Rajesh/Thorwarth Kerstin/Hug Hans Josef

Pulse induced modulation of electrical characteristics in ultrathin Molybdenum films. Plasma Surface Engineering, Garmisch, DE, 09-17 to 09-21 ●

Ganesan Rajesh/Thorwarth Kerstin/Trant Mathis/McKenzie David/Bilek Marcela/Hug Hans Josef/

Suppression of Moisture-induced Electrical Instabilities in High-mobility ZnON TFTs Fabricated from HiPIMS-made ZnON Films. ICMCTF, San Diego, US, 04-23 to 04-27 ◆

Ganesan Rajesh/Hug Hans Josef/Thorwarth Kerstin/Marks Nigel/Stüber Michael/Ulrich Sven/Arndt Mirjam/Guimond Sebastien/McKenzie David/Bilek Marcela/

Synthesis and Comparison of Highly Tetrahedral Amorphous Carbon by Arc-mixed HiPIMS and Arc-free HiPIMS Modes. ICMCTF, San Diego, US, 04-23 to 04-27 ●

Ganesan Rajesh/Thorwarth Kerstin/Prado Ainoha/Hauert Roland/Hug Hans Josef

Synthesis of highly adhesive and hard amorphous carbon films on Silicon and PTFE substrates by dual magnetron sputtering for sensing applications. Plasma Surface Engineering, Garmisch, DE, 09-17 to 09-21 ◆

Gehrig Jeffrey C./Penedo Marcos/Parschau Manfred/Schwenk Johannes/Marioni Miguel A./Hudson Eric W./Hug Hans J.

Surface single-molecule dynamics controlled by entropy at low temperatures. PhD Seminar @ Balgrist, Balgrist Klinik Zürich, 06-26 ●

Hug Hans J.

Application of Magnetic Force Microscopy to assess magnetic thin film multilayers with interfacial Dzyloshinskii-Moriya interaction. Seminar Talk, Messina, IT, 10-08 ●○

Hug Hans J.

Introduction to Scanning Force Microscopy for Materials Science. Workshop on Bio AFM, Empa St. Gallen, 09-27 ●○

Hug Hans J.

Quantitative Magnetic Force Microscopy and its Application for Assessing Thin Film Magnetism. Seminar Talk, PTB Braunschweig, DE, 11-14 ●○

Hug Hans J.

Using quantitative Magnetic Force Microscopy to assess Effects arising from Dzyloshinskii-Moriya interaction. IBM Almaden, San Jose, US, 07-13 ●○

Hug Hans J.

(De)pinning Skyrmions in Multilayers with interfacial Dzyloshinskii-Moriya Interaction. Empa PEER review, Empa Dübendorf, 10-22 to 10-24 ●○

Hug Hans J.

3S Poster Session. 3S, Arlberg, AT, 02-28 to 03-02 ■○

Hug Hans J./Penedo M./Mandru A.-O./Bacani M./Marioni M.A.

Application of Magnetic Force Microscopy to Assess Magnetic Thin Film Multilayers with Interfacial Dzyloshinskii-Moriya Interaction. ICN&T, Brno, CZ, 07-22 to 07-27 ●○

Hug Hans J./Gehrig J. C./Penedo M./Parschau M./Schwenk J./Marioni M.A./Hudson E. W.

Entropy control of the transition kinetics of a Molecular Rotor at low temperatures. ICN&T, Brno, CZ, 07-22 to 07-27 ●

Hug Hans J./Zhao X./Mandru A.-O./Bacani M./Marioni M.A.

Exchange bias and domain evolution at 10nm scales. ICM, San Francisco, US, 07-15 to 07-20 ●

Hug Hans J./Marioni M.A./Penedo M./Bacani M.

Mallinson-Halbach effect in chiral thin film magnetic structures. ICM, San Francisco, US, 07-15 to 07-20 ◆

Hug Hans J./Zhao X./Mandru A.-O./Penedo M./Bacani M./Marioni M.A.

Multi-frequency techniques for high-resolution Magnetic Force Microscopy. Multifrequency, Madrid, ES, 14-18 to 04-20 ●○

Hug Hans J./Mandru A.-O./Bacani M./Zhao X./Ahmed A.S./Meng K.-Y./Yang, F.Y.

Skyrmion formation in a SrRuO₃-SrIrO₃ epitaxial bilayer. JEMS, Mainz, DE, 09-03 to 09-07 ●

Hug Hans J./Bacani M./Mandru A.-O./Zhao X./Penedo M./Ahmed A.S./Meng K.-Y./Yang, F.Y.

Skyrmion formation in a SrRuO₃-SrIrO₃ epitaxial bilayer. Sol-Skymag, San Sebastian, 06-17 to 06-22 ●

Hug Hans J./Penedo M./Bacani M./Marioni M.A.

Thin Film Chiral thin-film magnetic structures display the Mallinson-Halbach effect. JEMS, Mainz, DE, 09-03 to 09-07 ●

Hug Hans J./Mandru A.-O./Yilderim O./Penedo M.

Thin film systems supporting skyrmion through interfacial DMI. System development based on quantitative MFM. Workshop on Skyrmions, Uni Basel, 11-22 to 11-23 ●○

Kawecki Maciej/Hany Roland/Jenatsch Sandra/Hug Hans J./Diethelm Matthias/Bernard Laetitia

Sequential tracking of ion migrations in active electronic devices by means of ToF-SIMS. Empa PhD Symposium, Dübendorf. 2017-11-13 ●

Kawecki Maciej/Hany Roland/Diethelm Matthias/Jenatsch Sandra/Grossmann Quirin/Hug Hans J./Bernard Laetitia

Assessment of ionic migrations and shifts in chemical equilibria in operating light-emitting electrochemical cells. Empa PEER Review, Dübendorf, 10-22 to 10-24 ◆

Kawecki Maciej/Hany Roland/Diethelm Matthias/Jenatsch Sandra/Grossmann Quirin/Bernard Laetitia/Hug Hans J.

In-situ measurement of ion redistribution and chemical equilibria shifts in operating thin film electronic devices. European SIMS conference, Münster, DE, 09-17 to 09-19 ●

Kawecki Maciej

the ToF-SIMS part of the Workshop – no specific title. Workshop der Technischen Akademie Esslingen – "Raster-elektronenmikroskopie und Analyse von Mikrobereichen und Oberflächenschichten", Dübendorf, 06-18 to 06-22 ■
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Mairena Anaïs/M. Parschau/J. Seibel/L. Zoppi/C. Wäckerlin/J. Li/M. Wienke/A. Terfort/K. Martin/N. Avarvari/K.-H. Ernst

Ullmann coupling of helical aromatic hydrocarbons on metal surfaces. 34th Annual Meeting of the Swiss Working Group for Surfaces and Interfaces, Fribourg, 02-01 ◆

Mairena Anaïs/Laura Zoppi/Johannes Seibel/Manfred Parschau/Alix F. Tröster/Konstantin Grenader/Andreas Terfort/Karl-Heinz Ernst

Chiral recognition among helical non-planar aromatic hydrocarbons on metal surfaces. 255th National Meeting of the American Chemical Society, New Orleans, US, 03-18 to 03-22 ●

Mairena Anaïs/Manfred Parschau/Johannes Seibel/M. Wienke/Laura Zoppi/Christian Wäckerlin/Jingyi Li/Kévin Martin/Narcis Avarvari/Andreas Terfort/Karl-Heinz Ernst

Ullmann coupling of helical aromatic hydrocarbons on metal surfaces. 255th National Meeting of the American Chemical Society, New Orleans, US, 03-18 to 03-22 ●

Mandru Andrada-Oana/Zhao Xue/Marioni Miguel/Hug Hans

Imaging the magnetization reversal in strongly exchange-coupled bilayers of TbFe and Co/Pt. International Conference on Magnetism (ICM) 2018, San Francisco, California, US, 07-16 to 07-20 ●

Mandru Andrada-Oana/Zhao Xue/Marioni Miguel/Hug Hans/Vogler Christoph/Suess Dieter

Imaging the magnetization reversal in strongly exchange-coupled bilayers of TbFe and Co/Pt. Joint European Magnetic Symposia (JEMS) 2018, Mainz, DE, 09-03 to 09-07 ●

Mandru Andrada-Oana/Zhao Xue/Marioni Miguel/Hug Hans

Imaging the magnetization reversal in strongly exchange-coupled bilayers. Swiss Physical Society (SPS) 2018, Lausanne/EPFL, 08-28 to 08-31 ●

Rieger Alexandra/Schnidrig Stephan/Probst Benjamin/Ernst Karl-Heinz/Wäckerlin Christian

Identification of On-Surface Reaction Mechanism by Targeted Metalation. SAOG Meeting, Freiburg, 02-01 ◆

Rieger Alexandra/Schnidrig Stephan/Probst Benjamin/Ernst Karl-Heinz/Wäckerlin Christian

Exchanging the central metal atoms in adsorbed macrocycles. DPG Frühjahrstagung, Berlin, DE, 04-11 to 04-16 ●

Scholder Olivier/Marcos Garcia Penedos/Cristiana Passiu/Hans Hug and Laetitia Bernard

Signal-to-Noise ratio enhancement of ToF-SIMS images in combination with AFM measurement. SIMS Europe conference, Münster, DE, 09-16 to 09-18 ●

Srivastava Gitika/Srivastava Gitika/Kudernac Tibor/Parschau Manfred/Stacko Peter/Feringa Bernard & Ernst Karl-Heinz

Single molecule manipulation via inelastic electron tunneling. SAOG-GSSI, 2018, Fribourg, 02-01 ◆

Srivastava Gitika/Srivastava, Kudernac Tibor/Parschau Manfred/Stacko Peter/Feringa Bernard & Ernst Karl-Heinz

Single Molecule Manipulation via Inelastic Electron Tunneling. DPG-2018, Berlin, DE, 03-11 to 03-16 ●

Srivastava Gitika/Srivastava, Kudernac Tibor/Parschau Manfred/Stacko Peter/Feringa Bernard & Ernst Karl-Heinz

Single Molecule Manipulation via Inelastic Electron Tunneling: molecular motors, walkers and nanocars. International Conference on Nanoscience + Technology (ICN+T) 2018, Brno, CZ, 07-22 to 07-27 ●

Thorwarth Kerstin

HiPIMS coatings for MedTech applications. 5th International Workshop on Plasma Science & Interfaces, St Gallen, 10-18 to 10-19 ●

Thorwarth Kerstin

Plasma based coatings for MedTech: needs and challenges. Plasmaworkshop, Mühlleithen, DE, 03-19 to 03-23 ● ○

Thorwarth Kerstin

Session D1: Surface Coatings and Surface Modifications in Biological Environments. ICMCTF, San Diego, US, 04-23 to 04-27 ▲

Thorwarth Kerstin

Smarter implants by plasma assisted coating. Bernd Spiessl Symposium, Basel, 06-14 to 06-17 ● ○

Thorwarth Kerstin

Smarter implants by plasma assisted coating. Plasma Process Symposium, Prag, CZ, 06-18 to 06-21 ● ○

Thorwarth Kerstin

Smarter Implants by PVD: Needs and Challenges. Institutskolloquium IOM Leipzig, Leipzig, DE, 07-05 to 07-06 ●
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Thorwarth Kerstin/Ganesan Rajesh/Chack Aarati/Greiner Maria/McKenzie David/Bilek MARcela/Hug Hans Josef/

Transparent and Low Resistance Hard Amorphous Carbon Thin Films by HiPIMS for Electronic Applications. IC-MCTF, San Diego, US, 04-23 to 04-27 ◆

Thorwarth Kerstin/Ganesan Rajesh/Chacko Aarati/Hug Hans Josef

Transparent, Conducting Carbon Coatings by HiPIMS. 5th International Workshop on Plasma Science & Interfaces, St Gallen, 10-18 to 10-19 ◆

Trant Mathis/Fischer Maria/Gauter Sven/Thorwarth Kerstin/Hug Hans-Josef

Tunable ion flux density and its impact on AlN thin films deposited in a confocal DC Magnetron Sputtering System. PhD Students at Materials Meet Life, Zürich, 06-26 ●

Trant Mathis/Fischer Maria/Gauter Sven/Thorwarth Kerstin/Hug Hans-Josef

Growth Morphology and its Impact on Piezoelectric Properties of AlN Thin Films Deposited by Reactive Magnetron Sputtering. XXIV. Erfahrungsaustausch Oberflächentechnologie mit Plasma- und Ionenstrahlprozessen, Mühlleihen / Vogtland, DE, 03-20 to 03-23 ●

Trant Mathis/Fischer Maria/Thorwarth Kerstin/Hug Hans-Josef

Growth Morphology and Piezoelectric Properties of AlN Thin Films Deposited by Reactive DC Magnetron Sputtering. International Conference on Metallurgical Coatings and Thin Films, San Diego, US, 04-23 to 04-27 ●

Trant Mathis/Fischer Maria/Thorwarth Kerstin/Hug Hans-Josef

Growth Morphology of AlN Thin Films Deposited by Reactive DC Magnetron Sputtering and its Influence on the Piezoelectric Properties. 16th International Conference on Plasma Surface Engineering, Garmisch-Partenkirchen, DE, 09-17 to 09-21 ◆

Trant Mathis/Fischer Maria/Gauter Sven/Thorwarth Kerstin/Hug Hans-Josef

Influence of ion flux density on Growth Morphology and Piezoelectric Properties of AlN. Thin Films in DC Magnetron Sputtering. 5th International workshop Plasma Science & Interfaces, St Gallen, 10-18 to 10-19 ●

Wäckerlin Christian

Chemistry and magnetism of organometallic complexes at surfaces. Seminar of Klaus Kern, MPI Stuttgart, DE, 07-11 ● ○

Wäckerlin Christian

International workshop On-Surface Synthesis, Sant Feliu de Guixols, ES, 09-24 to 09-28 ▲ ○

Wäckerlin Christian/Mairena Anaïs/Wienke Martin/Martin Kévin/Avarvari Narcis/Terfort Andreas/Ernst Karl-Heinz

Stereospecific Autocatalytic Surface Explosion Chemistry of Polycyclic Aromatic Hydrocarbons. MOLCH Meeting, Bern, 06-29 ●

Wäckerlin Christian/Rieger Alexandra/Li Jingyi/Schnidrig Stephan/Probst Benjamin/Ernst Karl-Heinz

Atom exchange reactions in surface-adsorbed porphyrin-like macrocycles. International workshop On-Surface Synthesis, Sant Feliu de Guixols, ES, 09-24 to 09-28 ●

Wäckerlin Christian/Rieger Alexandra/Li Jingyi/Schnidrig Stephan/Probst Benjamin/Ernst Karl-Heinz

Atom exchange reactions in surface-adsorbed porphyrin-like macrocycles. Symposium and Summer School 2018 of LightChEC, Les Diablerets, 08-19 to 08-23 ◆

Wäckerlin Christian/Rieger Alexandra/Schnidrig Stephan/Probst Benjamin/Ernst Karl-Heinz

Exchanging the central metal atom in a surface-adsorbed porphyrin-like macrocycle. EMRS – Scanning probe frontiers in molecular 2D-architecture world, Strasbourg, FR, 06-18 to 06-21 ●

Wäckerlin Christian/Rieger Alexandra/Schnidrig Stephan/Probst Benjamin

Atom exchange in and atomic hydrogen induced chemistry of porphyrin-related macrocycles. SAOG Meeting, Freiburg, 02-01 ●

Yildirim Oguz/Marioni Miguel/Falub Claudiu/Jaeger Dominik/Rohrmann Hartmut/Hug Hans-Joseph

Tuning perpendicular magnetic anisotropy in Co/Pt multilayers: crystalline texture vs. interface quality. International Colloquium on Magnetic Films and Surfaces, UC Santa Cruz, US, 07-22 to 07-27 ◆

Aengenheister Leonie/Dietrich, D./Sadeghpour, A./Muoth, C./Wichser, A./Manser, P./Diener, L./Karst, U./Wick, P./Buerki-Thurnherr, T.

Investigation of surface modification dependent placental uptake, accumulation and translocation of gold nanoparticles using human in vitro and ex vivo models. 11th European Placenta Perfusion Workshop, Hradec Kralove, CZ, 05-30 to 05-31 ●

Buerki Tina

Session: Biological Barriers. Nanotoxicology 2018, Neuss, DE, 09-18 to 09-21 ▲

Buerki-Thurnherr Tina

Nanoparticles-biobarriers interactions: impact of particle properties on barrier penetration and functionality. VERT Focus Event, Empa, Dübendorf, 03-16 ● ○

Bürki Tina

Nano-biobarriers interactions: Particle-specific considerations. SST Annual Meeting 2018, Basel, 11-29 to 11-30 ●
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Buerki Tina/Chortarea, S./Manser, P./Fortino, V./Wick, P./Greco, D.

Gene expression profiling of an ex vivo human placenta perfusion model following exposure to engineered nano-materials. Placenta Perfusion Workshop, Hradec Kralove, CZ, 05-30 to 05-31 ●

Bürki Tina/Kucki, M./Aengenheister, L./Diener, L./Rippl, AV./Vranic, S./Newman, L./Vazquez, E./Kostarelos, K./Wick, P.

Graphene oxide interaction with human placental trophoblast viability, functionality and barrier integrity. Nanotoxicology 2018, Neuss, DE, 09-18 to 09-21 ◆

Buerki-Thurnherr Tina/Mouth, C./Grossgarten, M./Karst, U./Manser, P./Diener, L./Kucki, M./Wichser, A./Jochum, W./Wick, P.

Nanoparticle uptake and toxicity assessment in a novel standardized human placental organoid model. Biointerfaces International 2018, Zürich, 08-14 to 08-16 ●

Chortarea Savvina/Manser, P./Fortino, V./Wick, P./Greco, D. and Bürki-Thurnherr/T.

Gene expression profiling of an ex vivo human placenta perfusion model following exposure to engineered nano-materials. NanoTox Conference, Neuss, DE, 09-18 to 09-21 ●

Chortarea Savvina/Manser, P./Fortino, V./Wick, P./Greco, D. and Bürki-Thurnherr/T.

Transcriptomic profiling reveals gene expression changes in an ex vivo human placenta model following exposure to engineered nanomaterials. NanoBio Conference, Heraklion, GR, 09-24 to 09-28 ●

Hempt Claudia/Jean Pierre Kaiser/Alexandra Rippel/Heinrich Hofman/Peter Wick/Tina Buerki-Thurnherr/Cordula Hirsch,

The impact of synthetic amorphous silica (E 551) on an advanced in vitro model of the human intestinal barrier. PhD Symposium Empa, Dübendorf, 11-26 ◆

Hempt Claudia/Jean Pierre Kaiser/Alexandra Rippel/Heinrich Hofman/Peter Wick/Tina Buerki-Thurnherr/Cordula Hirsch,

Advanced in vitro models of the human intestinal barrier – improvements for nanomaterial translocation studies. BioBarrier Conference, Saarbrücken, DE, 08-27 to 08-29 ●

Hempt Claudia/Jean Pierre Kaiser/Alexandra Rippel/Heinrich Hofman/Peter Wick/Tina Buerki-Thurnherr/Cordula Hirsch,

Advanced in vitro models of the human intestinal barrier – improvements for nanomaterial translocation studies. BioBarrier Conference, Saarbrücken, DE, 08-27 to 08-29 ◆

Hempt Claudia/Joelle Medinger

Nanoparticle – protein interactions and computational predictions. CCMX Winterschool 2018, Kandersteg, 01-07 to 01-12 ●

Hempt Claudia/Jean Pierre Kaiser/Alexandra Rippel/Heinrich Hofman/Peter Wick/Tina Buerki-Thurnherr/Cordula Hirsch,

The impact of synthetic amorphous silica (E 551) on an advanced in vitro model of the human intestinal barrier. EFSA- Science, Food, Society, Parma, IT, 09-18 to 09-21 ◆

Hempt Claudia/Jean Pierre Kaiser/Alexandra Rippel/Heinrich Hofman/Peter Wick/Tina Buerki-Thurnherr/Cordula Hirsch,

The impact of synthetic amorphous silica (E 551) on an advanced in vitro model of the human intestinal barrier. Swiss Tox Annual Meeting, Basel, 11-29 to 11-30 ◆

Herrman Inge

Nanoparticle based Tissue Adhesives with Biomimetic Activity. DPhG Annual Meeting 2018 (Deutsche Pharmazie Gesellschaft), Hamburg, DE, 10-03 to 10-05 ● ○

Herrmann Inge

Biomedical Imaging Across Scale: The Importance of the Ultrastructure and its Context. BIO-X Conference 2018, St.Gallen, 03-16 ● ○

Herrmann Inge

Exploring the Characteristics of Soft Tissue Calcification. Lunch & Learn Seminar BIOTRONIK, Bülach, 12-05 ● ○

Herrmann Inge

When Particles Meet: Exploring the Prospects of Nanoparticle-based Radioenhancement. Seminar at the German Proton Center (Essen), Essen, DE, 07-19 ● ○

Herrmann Inge

Magnetic Blood Purification: From Concept to Clinics. Nanomedicine Conference 2018, Rome, IT, 06-18 to 06-20 ● ○

Herrmann INGE

Magnetic Blood Purification: From Concept to Clinics. Nanomedicine Conference 2018, Rome, IT, 06-18 to 06-20 ▲ ○

Herrmann Inge

Magnetic Blood Purification: Towards Personalized Therapy. GRC Personalized Medicine, Hong Kong, HK, 07-29 to 08-03 ◆ ○

Hirsch Cordula

NanoScreen annual Meeting. NanoScreen Meeting, Bern, 12-11 to ■

Hirsch Cordula	The complexity of "simple" in vitro methods – How nanomaterials even top the challenge. CCMX Winter School: Nanoparticles – From Fundamentals to Applications in Life Sciences, Kandersteg, 01-07 to 01-12 ● ○
Hirsch Cordula	Young woman in science session. 9 th International Conference on Nanotoxicology, Neuss, DE, 09-18 to 09-21 ▲
Hirsch Cordula/Jean Pierre Kaiser/Alexandra Rippel/Heinrich Hofman/Peter Wick/Tina Buerki-Thurnherr/Hempt Claudia	The impact of synthetic amorphous silica (E 551) on an advanced in vitro model of the human intestinal barrier. Nanotox 2018, Neuss, DE, 09-18 to 09-21 ◆
Hirsch Cordula/Kaiser, J.-P./Rippl, A./Kucki, M./Hofmann, H./Buerki-Thurnherr, T./Wick, P./	Assessing the impact of nanostructured silica on the gut: an in vitro approach. 20 th Barrier and Transporter Meeting, Bad Herrenalb, DE, 05-07 to 05-09 ◆
Hirsch Cordula/Rippl, A./May, S./Walter, A./Heo, M.B./Kwak, M./Roesslein, M./Song, N.W./Wick, P./Bohmer, N.	Interference of Engineered Nanomaterials in Flow Cytometry: A Case Study. Nanotox 2018, Neuss, DE, 09-18 to 09-21 ◆
Hirsch Cordula/Roesslein, M./Bohmer, N./Wick, P.	Understanding nanosafety – the impact of assay performance in vitro. 9 th International conference on Nanotoxicology, Neuss, DE, 09-18 to 09-21 ● ○
Hirsch Cordula/Wick, P.	Understanding Nanosafety. CCMX-NCCR MARVEL Materials Science Day, Bern, 10-04 ● ○
Iranpour Anaraki Neda	Microfluidic-SAXS for the Study of Nanoparticles Agglomeration Kinetics in Biomimetic Environment. BIO-X Conference, St.Gallen, 03-16 ●
Iranpour Anaraki Neda/Mauryaa, A./Toncelli, C./Wick, P./Domman, A./Sadeghpour, A./Neels, A.	Novel Quantitative Method based on Small Angle X-ray Scattering for in-situ Understanding of Nanoparticles Agglomeration kinetics. SGK annual Meeting, PSI, 09-18 ◆
Iranpour Anaraki Neda	Quantitative Method based on Small Angle X-ray Scattering to Understand Nanoparticles Agglomeration in Biological Environment. PhD Symposium, Dübendorf, 11-26 ◆
Iranpour Anaraki Neda/Heidt, S.	Magnetic Nanoparticles for Therapy. CCMX Winterschool 2018, Kandersteg, 01-07 to 01-12 ●
Iranpour Anaraki Neda	Understanding Nanoparticles Agglomeration in Biological Environment. Biointerfaces International 2018, Zürich, 08-14 to 08-16 ◆
Keevend Kerda	PhD Symposium. PhD Symposium, Dübendorf, 11-26 ■
Keevend Kerda/Stiefel, M./Krummenacher, R./Starsich, F./Gerken, L./Herrmann, I.	Correlative cathodoluminescence electron microscopy (CCLEM) bioimaging with RE3+ element doped nanocrystals. Bioanalytical Sensors (GRS) and Bioanalytical Sensors, Salve Regina University, Newport, RI, US, 06-23 to 06-29 ◆
Keevend Kerda/Stiefel, M./Herrmann, I.	Tb3+-doped nanoparticles for correlative cathodoluminescence electron microscopy bioimaging. Swiss nanoconvention, ETH Zürich, 06-06 to 06-07 ◆
Korejwo Daria/Woranan Netkueakul/Savvina Chortarea/Tobias Hammer/Jing Wang/Barbara Rothen-Rutishauser/Tina Buerki-Thurnherr/Peter Wick	Characterization of aerosol released from abrasion of epoxy/graphene related material (GRM) composites and in vitro toxicity assessment of pristine GRMs and abraded particles on human macrophages. SAG meeting 2018, Bern, 11-05 ●
Korejwo Daria/Chortarea Savvina/Woranan Netkeakul/Jing Wang/Barbara Rothen-Rutishauser/Bürki-Turnherr Tina/Wick Peter	Interaction of graphene related materials and abraded materials from reinforced nanocomposites with in vitro lung models. Group seminar AMI Fribourg, Fribourg, 09-17 ●
Korejwo Daria/Chortarea Savvina/Netkueakul Woranan/Wang Jing/Rothen-Rutishauser Barbara/Buerki-Thurnherr Tina/Wick Peter	Interaction of graphene related materials with human lung epithelial cells, macrophages and fibroblasts in vitro. PhD Symposium, Dübendorf, 11-26 ◆
Korejwo Daria/Chortarea Savvina/Woranan Netkeakul/Jing Wang/Barbara Rothen-Rutishauser/Bürki-Turnherr Tina/Wick Peter	Interaction of graphene related materials with human lung epithelial cells, macrophages and fibroblasts in vitro. Nanotox 2018, Neuss, DE, 09-18 to 09-21 ◆
Korejwo Daria/Burr Loic	Nanoparticles for in vivo application: From fundamentals to Applications in Life Sciences. CCMX Winterschool 2018, Kandersteg, 01-07 to 01-12 ●

Matter Tino Engineering the Bioactivity of Flame-made Ceria and Ce-ria/Bioglass Hybrid Nanoparticles for Wound Management. PhD Symposium, Dübendorf, 11-26 ◆
Matter Tino/L. Furer/F. Starsich/S. Pratsinis/I. Herrmann Nanoglue: Tailoring the bioactivity of flame-made nanoparticles for surgical applications. Swiss Nanoscience Institute Annual Meeting, Lenzerheide, 09-13 to 09-14 ◆
May Sarah/Hirsch, C./Bohmer, N./Kaiser, J-P./Bürkle, A./Wick, P. Transient DNA damage following exposure to gold nanoparticles. Nanotox 2018, Neuss, DE, 09-18 to 09-21 ◆
Milosevic Ana/Bellucci, S./D'Anna Huber, C./Wick, P. contactpointnano.ch. SAG Meeting, Bern, 11-05 ●
Milosevic Ana/Bellucci, S./D'Anna Huber, C./Wick, P. contactpointnano.ch. Get ready for the future! Understanding new regulations for nano-enabled products, Dübendorf, 12-07 ■
Milosevic Ana/Bellucci, S./D'Anna Huber, C./Wick, P. contactpointnano.ch. Clinam, Basel, 09-02 to 09-05 ◆
Milosevic Ana/Bellucci, S./D'Anna Huber, C./Wick, P. contactpointnano.ch. SSB RM, Fribourg, 06-06 to 06-07 ◆
Netkuleakul Woranan/Korejwo, D./Chortarea, S./Hammer, T./Rothen-Rutishauser, B./Buerki-Thurnherr, T./Wang, J./Wick, P. Characterization of aerosol released from abrasion of epoxy/graphene related material (GRM) composites and in vitro toxicity assessment of pristine GRMs and abraded particles on human macrophages. SAG meeting 2018, Bern, 11-05 ●
Netkuleakul Woranan/Korejwo, D./Chortarea, S./Hammer, T./Wick, P./Buerki-Thurnherr, T./Wang, J. In vitro toxicity assessment of abraded epoxy/graphene-related material composites on human macrophages. PhD Symposium, Dübendorf, 11-26 ◆
Netkuleakul Woranan/Korejwo, D./Chortarea, S./Wick, P./Buerki-Thurnherr, T./Wang, J. Aerosol release during abrasion of epoxy/graphene-based material composites and in vitro toxicity assessment on THP-1 cell line of abraded particles. Aerosol Technology 2018, Bilbao, ES, 06-18 to 06-20 ●
Netkuleakul Woranan/Korejwo, D./Chortarea, S./Hammer, T./Wick, P./Buerki-Thurnherr, T./Wang, J. In vitro toxicity assessment of abraded epoxy/graphene-related material composites on human macrophages. Nanotox 2018, Neuss, DE, 09-18 to 09-21 ◆
Roesslein Matthias Metrological aspects of particle number determination. Characterization methods and standards on nanoparticles in medical products, JRC Ispra, IT, 12-03 to 12-04 ● ○
Roesslein Matthias/Bryant C. Nelson (NIST) The EU-US Cooperation in Standardization of Analytical Methods. Clinam, Basel, 09-03 to 09-05 ● ○
Wick Peter Nanomaterial development for unmet clinical needs. Balgrist Seminar, Zürich, 11-07 ● ○
Wick Peter The national contactpointnano.ch. Safe handling of nanomaterials, regulation and knowledge transfer. DaNa Meeting, Neuss, DE, 09-17 ●
Wick Peter Nanomaterial – Cell Interactions: Disentangling the structure – activity relationship of graphene related materials. CLINAM, Basel, 09-03 to 09-05 ●
Wick Peter none. SST Annual Meeting, Basel, 11-29 to 11-30 ▲
Wick Peter none. CCMX Winterschool 2018, Kandersteg, 01-07 to 01-12 ■
Wick Peter Safety research for a responsible use of nanomaterials. CNRS Sommer School ANF Nanomed 2018, Dijon, FR, 06-25 to 06-28 ● ○
Wick Peter The national contactpointnano.ch. Swiss Nanoconvention, Zürich, 06-06 to 06-07 ●
Wick Peter Knocking on placenta's door: engineered nanoparticles at the human placenta barrier. 255 th ACS National Meeting & Exposition, New Orleans, US, 03-18 to 03-22 ●
Wick Peter Session Biological Barriers. Nanotox 2018, Neuss, DE, 09-18 to 09-21 ▲
Braun Oliver/Perrin Mickael/Thodkar Kishan/Calame Michel Thermoelectric Effects in CVD-Graphene. 20 st Internationals Winterschool on New Developments in Solid State Physics, Mauterndorf, AT, 01-27 to 02-02 ◆
Calame Michel Charge transport in nanoscale junctions. From Solid State to BioPhysics IX, Dubrovnik, HR, 06-16 to 07-23 ● ○

<p>Calame Michel Charge transport in nanoscale junctions. International Gold Conference , Paris, FR, 07-15 to 07-18 🟡 ○</p>
<p>Csontos Miklos/Pósa László/El Abbassi Maria/Makk Péter/Sánta Botond/Nef Cornelia/Calame Michel/Halbritter András Multiple physical timescales and dead time rule in few-nm sized graphene-SiO_x-graphene memristors. Graphene 2018, Dresden, DE, 06-26 to 06-29 ◆</p>
<p>Gagnidze Tornike /Ma Huan/Shorubalko Ivan/Bona Gian-Luca/Calame Michel/La Mattina Fabio Highly Strained SrO Nano-domains. The 2018 Swiss Workshop on Materials with Novel Electronic Properties, Les Diablerets, 08-29 to 10-31 ◆</p>
<p>Gagnidze Tornike/Ma Huan/Shorubalko Ivan/Bona Gian-Luca/Calame Michel/La Mattina Fabio Highly Strained SrO Nano-domains. The International Workshop on Oxide Electronics, Les Diablerets, 10-01 to 10-03 ◆</p>
<p>Grossmann Günter/ Korrosion auf elektronischen Baugruppen. Europäisches Elektro-Kolleg, Colonia San Jordi, ES, 03-21 to 03-23 🟡 ○</p>
<p>Grotevent Matthias/Hail Claudio/Yakunin Sergii/Dirin Dmitry/Thodkar Kishan/Borin Barin Gabriela/Poulikakos Dimos/Kovalenko Maksym/Shorubalko Ivan Graphene-Quantum Dot Infrared Photodetectors. Gordon Research Conference – Colloidal Semiconductor Nanocrystals, Bryant University/Smithfield/RI, US, 07-15 to 07-20 ◆</p>
<p>Hack Erwin Member of the Scientific Committee. Photomechanics 2018, Toulouse, FR, 03-20 to 03-22 ■</p>
<p>Hack Erwin/Dvurecenska Ksenija/Lampeas George/Patterson Eann/Siebert Thorsten/Szigeti Eszter Steps towards Industrial Validation Experiments. ICEM 2018 – 18th International Conference on Experimental Mechanics, Brussels, BE, 07-01 to 07-05 🟡</p>
<p>Hack Erwin/Valzania Lorenzo/Zolliker Peter/Feurer Thomas THz ptychography and digital holography: a comparison. Photomechanics 2018, Toulouse, FR, 03-20 to 05-22 🟡</p>
<p>Jacob Peter Early life failures in automotive electronics and their root causes. ISTFA 2018, Phoenix, US, 10-28 to 11-01 🟡 ○</p>
<p>Jacob Peter Elektronik für Implantate: Fehlerquellen und Zuverlässigkeitsaspekte. Arbeitskreis – Zuverlässigkeit von Implantaten und Biostrukturen. DVM Deutscher Verband für Materialforschung und -prüfung e.V. , Berlin, DE, 10-19 to 10-20 🟡 ○</p>
<p>Jacob Peter ESD Risiken in Bestückungsautomaten und deren messtechnische Untersuchung. ITG Fach-Tagung "Fehlermechanismen bei kleinen Geometrien", Grainau, DE, 05-08 to 05-09 🟡</p>
<p>Jacob Peter Grundregeln für eine funktionsgerechte PCB Entwicklung – aus der Erfahrung von Ausfallanalysen. SMT Hybrid Packaging 2018 , Nürnberg, DE, 06-05 to 06-07 🟡 ○</p>
<p>Jacob Peter Introduction to Physical Failure Analysis. EOS/ESD Manufacturing Symposium in Germany, Dresden, DE, 11-06 to 11-09 🟡 ○</p>
<p>Jacob Peter New ESD measurement and debugging approaches in automated PCB (Printed Circuit Board) assembly processing. EOS/ESD Manufacturing Symposium in Germany, Dresden, DE, 11-06 to 11-09 🟡</p>
<p>Jacob Peter Power Device Burned Completely – And Now, How to Find the Root Cause? ISTFA 2018, Phoenix, US, 10-28 to 11-01 🟡</p>
<p>Jacob Peter The revised ESD FORUM guideline 1013 (2.0) for ESD risk evaluation of robotic process equipment and its countermeasures. EOS/ESD Manufacturing Symposium in Germany, Dresden, DE, 11-06 to 11-09 🟡 ○</p>
<p>Jacob Peter/Furrer Roman Leistungsmodul abgebrannt – was nun? Eine Einführung in die Fehleranamnese beim Ausfall von Leistungsbauerelementen. ITG Fach-Tagung "Fehlermechanismen bei kleinen Geometrien", Grainau, DE, 05-08 to 05-09 🟡 ○</p>
<p>La Mattina Fabio/T. Gagnidze/M. Huan/A. Shengelaya/C. Cancellieri/I. Shorubalko/E. Hack/V. Strocov/A. Chickina/M. Caputo/D. Passerone/C. Pignedoli/M. Bon/R. Erni/and G.-L. Bona. Angular Photoemission Spectroscopy investigation of STO/YBCO interface. 2018 Swiss Workshop on Materials with Novel Electronic Properties (MANEP), Les Diablerets, 08-29 to 10-31 ◆</p>
<p>Lüder Lars/Gubicza Agnes/Stiefel Michael/Wipf Mathias/Toncelli Claudio/Rossi René/Calame Michel Synthesis of conductive metal-organic architectures for biochemical sensing. NanoBio Tech Conference , Montreux, 10-28 to 10-31 ◆</p>
<p>Ma Huan/Patrik Hoffmann/Bernhard Walfort/Hans-Rudolf Hagemann/Markus Pollnau/Matthias Koebel/Ivan Shorubalko/Fabio La Mattina Single-crystal strontium aluminate thin films by pulsed laser deposition (PLD). The 4th International Workshop on Persistent and Photostimulable Phosphors (2018), Beijing, CN, 04-04 to 04-08 🟡</p>

- Ma Huan/Tornike Gagnidze/Bernhard Walfort/Ivan Shorubalko/Michel Calame/Fabio La Mattina**
Single-crystal strontium aluminate thin films by pulsed laser deposition. 2018 Swiss Workshop on Materials with Novel Electronic Properties, Les Diablerets, 08-29 to 08-31 ◆
- Ma Huan/Tornike Gagnidze/Ivan Shorubalko/Michel Calame/Bernhard Walfort/Fabio La Mattina**
Single-crystal strontium aluminate thin films by pulsed laser deposition. 2018 25th International Workshop on Oxide Electronics, Les Diablerets, 10-01 to 10-03 ◆
- Mermoud Yves/Synhaivska Olena/Wipf Mathias/Calame Michel**
Design of an Extended-Gate Field-Effect Transistor Biosensor for Lab-on-a-Chip Applications. 2nd Swiss Symposium in Point-of-Care Diagnostics, Chur, 10-18 ◆
- Mermoud Yves/Synhaivska Olena/Wipf Mathias/Calame Michel**
Design of an Extended-Gate Field-Effect Transistor Biosensor for Lab-on-a-Chip Applications. NanoBioTech-Montreux 2018, Montreux, 10-29 to 10-31 ◆
- Mermoud Yves/Baghernejad Masoud/Sahana Sarkar/Synhaivska Olena/Wipf Mathias/Calame Michel**
Design of an Extended-Gate Field-Effect Transistor Biosensor for Membrane Transport Monitoring. NCCR MSE Fellow Retreat 2018, Magglingen, 05-28 to 05-29 ◆
- Mermoud Yves/Baghernejad Masoud/Sahana Sarkar/Synhaivska Olena/Wipf Mathias/Calame Michel**
ISFET Biosensing for Molecular Systems and Factories Monitoring. NCCR MSE Site Visit 2018, Basel, 06-18 to 06-19 ◆
- Overbeck Jan**
Electrical and Optical Properties of Atomically Precise Graphene Nanoribbons. Annual Meeting of the Swiss Nanoscience Institute, Lenzerheide, 09-12 to 09-14 ●
- Overbeck Jan/Wang Lujun/Braun Oliver/El Abbassi Maria/Borin Barin Gabriela/Ruffieux Pascal/Fasel Roman/Baumgartner Andreas/Schönenberger Christian/Calame Michel**
Raman Spectroscopy from Graphene to GNRs. Nanoscience in the Snow, Mürren, 01-17 to 01-19 ◆
- Shorubalko Ivan**
Interaction Between Energetic Ions and Freestanding 2D Materials. Seminar, ICFO – The Institute of Photonic Sciences. Hosted by Prof Frank Koppens, ICFO, Castelldefels (Barcelona), ES, 08-08 ●○
- Shorubalko Ivan/Jakob Buchheim/Roman M. Wyss/Kyoungjun Choi/Hyung Gyu Park**
Interaction between energetic ions and freestanding 2D materials. 34th International Conference on the Physics of Semiconductors, (ICPS2018), www.icps2018.org, Montpellier, Corum, FR, 07-29 to 08-03 ◆
- Shorubalko Ivan/P. Butti/K. Ensslin**
Rectification mechanisms in graphene three-terminal nanojunctions. 34th International Conference on the Physics of Semiconductors (ICPS2018), www.icps2018.org, Montpellier, Corum, FR, 07-29 to 08-03 ●
- Synhaivska Olena/Mermoud Yves/Baghernejad Masoud/Gubicza Agnes/Alshanski Israel/Yitzchaik Shlomo/Wipf Mathias/Calame Michel**
Cu²⁺ sensing realized with gold-coated silicon nanowire ion-sensitive field effect transistor based biosensor. Eurosenors 2018, Graz, AT, 09-10 to 09-12 ◆
- Valzania Lorenzo/Hack Erwin/Brönnimann Rolf/Zolliker Peter/Feurer Thomas**
Resolution limits of terahertz ptychography. SPIE Photonics Europe, Unconventional Optical Imaging, Strasbourg, FR, 04-22 to 04-26 ●
- Wipf Mathias/Sarkar Sahana/Synhaivska Olena/Mermoud Yves/Gubicza Agnes/Baghernejad Masoud/Calame Michel**
Rapid diagnosis of preeclampsia at the point-of-care. Swiss Medtech Day 2018, Bern, 06-12 ◆

Mobility, Energy and Environment

- Eggenschwiler Kurt/Sperdin Vincent/Schoenwald Stefan**
Ergebnisse neuer Untersuchungen zum Empa-Pendelfallhammer. Herbsttagung der Schweizerischen Gesellschaft für Akustik SGA-SSA, Sursee, 11-08 ●○
- Eggenschwiler Kurt/Sperdin Vincent/Schoenwald Stefan**
Neue Untersuchungen zum Messverfahren zur Simulation haustechnischer Benutzungsgeräusche mit dem Pendelfallhammer gemäss Schweizer Norm SIA 181 „Schallschutz im Hochbau.“ DAGA 2018 – 44. Jahrestagung für Akustik, München, DE, 03-21 ●
- Eggenschwiler Kurt/Rütti Samuel/Strobel Markus/Gianola Corinne**
Herbsttagung der Schweizerischen Gesellschaft für Akustik SGA-SSA, Sursee, 11-08 to 11-09 ■
- Guski Rainer/Schreckenberg Dirk/Brink Mark/Isermann Ullrich/Schmid Rainer/Schäffer Beat/Wunderli Jean Marc**
Ein Projekt zur Re-Analyse von Fluglärm-Belastungsdaten: Leq+X. DAGA 2018 – 44. Jahrestagung für Akustik, München, DE, 03-22 ●
- Hannema Gwenaël/Bergamini Andrea/Van Damme Bart/Zemp Armin**
Calcul des propriétés dynamiques de structures élastiques périodiques. 15^{ème} Forum CADFEM & ANSYS, Lausanne, 09-05 ●

Hannema Gwenael/Bergamini Andrea/Van Damme Bart/Zemp Armin

Derivation of dynamic properties of periodic elastic structures. CADFEM ANSYS Simulation Conference 2018, Rapperswil, 06-14 🍷

Hannema Gwenael/Zemp Armin/Leinenbach Christian

Organisation of the Additive Manufacturing Technologietag in collaboration Christian Leinenbach and CADFEM. Technologietag Additive Manufacturing: Prozess-Simulation für die additive Fertigung, Empa Akademie, Dübendorf, 10-02 ■

Hannema Gwenael/Tröbs Hans-Martin/Van Damme Bart/Zemp Armin/Heutschi Kurt/Lechner Bernhard/Zhang Junyang/Hecht Markus/Sohr Sebastian/Wunderli Jean-Marc

Validation of a FEM Structure-Borne Sound Radiation Model For Railway Rolling Noise. NOVEM 2018 (Noise and Vibration Emerging Methods), Ibiza, ES, 05-06 to 05-10 🍷

Jäger David/Zellmann Christoph/Wunderli Jean Marc/Simons D. G./Snellen M.

Validation of the sonAIR aircraft noise simulation model – a case study for Schiphol Airport. Inter-Noise 2018, Chicago, US, 08-26 to 08-29 🍷 ○

Kian Far Ehsan/Wolters Tatjana/Zellmann Christoph/Langer Sabine

Effect of Flight Schedule and Fleet Mix on the Ground Noise around Airports based on a Multi-Level, Multi-Fidelity Approach. DAGA 2018 – 44. Jahrestagung für Akustik, München, DE, 03-21 ♦

Mecking Simon/Schanda Ulrich/Schoenwald Stefan

Material Characterisation of Cross Laminated Timber using experimental wave velocities. Euronoise 2018, Crete, GR, 05-27 to 05-30 🍷 ○

Miniaci Marco

Observation of topologically protected helical edge waves in elastic plates. Action CA15125 Meeting: Symposium on Acoustic Metamaterials (SAM), Xativa, ES, 11-07 to 11-09 🍷

Morin Benjamin/Zemp Armin/Van Damme Bart/Hannema Gwenael

Effect of material properties on fluid-structure interactions in brass instruments, Part 2: Numerical investigation. Fifth International Romantic Brass Symposium, Biel, 11-20 to 11-22 🍷

Morin Benjamin

Rail Pad Super-Elements for Track Decay Rate Computation. World Congress of Computational Mechanics, New York, US, 07-22 to 07-27 🍷

Pieren Reto/Lauper Demian/Heutschi Kurt

Auralisation and visualisation of railway vehicle pass-bys. Final conference of the DESTINATE project, Valencia, ES, 10-30 🍷 ○

Pieren Reto/Heutschi Kurt

Auralization and visualization of rail vehicle pass-by events. Workshop on railway auralization and visualization, Empa, 08-22 ■ ○

Pieren Reto/Lauper Demian/Heutschi Kurt

Demonstrator for rail vehicle pass-by events. EuroNoise 2018, European Congress and Exposition on Noise Control Engineering, Crete, GR, 05-27 to 05-31 🍷 ○

Pieren Reto/Bertsch L./Blinstrub J./Schäffer Beat/Wunderli Jean Marc

Simulation process for perception-based noise optimization of conventional and novel aircraft concepts. AIAA aerospace sciences meeting, Kissimmee, Florida, US, 01-08 to 01-12 🍷 ○

Röösli Martin/Vienneau Danielle/Foraster Maria/Eze Ikenna C./Héritier Harris/Schaffner Emmanuel/Thiesse Laurie/Rudzik Franziska/Pieren Reto/Habermacher Manuel/Köpfler Mischa/Brink Mark/Cajochen Christian/Wunderli, Jean Marc/Probst-Hensch Nicole

SIRENE: Short and Long Term Effects of Transportation Noise Exposure. DAGA 2018 – 44. Jahrestagung für Akustik, München, DE, 03-22 🍷

Schäffer Beat

Aktuelle Laboruntersuchungen an der Empa zur Lästigkeitswirkung von Windturbinenlärm. SGA Frühjahrstagung, St. Imier, 05-24 🍷 ○

Schlatter Felix/Köpfler Mischa/Wunderli Jean Marc

Relevance of buildings in aircraft noise predictions. Inter-Noise 2018, Chicago, US, 08-26 to 08-29 🍷 ○

Schoenwald Stefan/Tröbs Hans-Martin

Assessment of Structure-borne Sound Intensity of Solid Wood Walls using a Scanning Laser Doppler-Vibrometer. Euronoise 2018, Crete, GR, 05-27 to 05-30 🍷 ○

Schoenwald Stefan/Tröbs Hans-Martin

Assessment of structure-borne sound intensity of solid wood walls using a scanning laser Doppler-vibrometer. Euronoise 2018, Crete, GR, 05-27 to 05-31 🍷 ○

Schoenwald Stefan

Neue Ergebnisse zur Akustik im Holzbau, Teil 2. Herbsttagung SGA-SSA, Sursee, 11-08 to 11-09 🍷 ○

Schoenwald Stefan

Structured Session on "Advanced Measurement Techniques in Building Acoustics." Euronoise 2018, Crete, GR, 05-27 to 05-30 ▲

Schwab Olivier/Zellmann Christoph/Wunderli Jean Marc

Estimation of engine rotational speed from radar data for single flight aircraft noise simulations. Euronoise 2018, Crete, GR, 05-28 to 05-31 🍷

Sievers Tessa/Eggenschwiler Kurt/Taghipour Armin/Blau Matthias

Untersuchungen zur raumakustischen Aufenthaltsqualität in Innenhöfen von Wohnbauten. DAGA 2018 – 44. Jahrestagung für Akustik, München, DE, 03-21 🍷

Taghipour Armin/Pieren Reto/Schlatter Felix/Schäffer Beat

Annoyance reactions to noise of helicopters and propeller-driven aircraft. Euronoise, Crete, GR, 05-27 to 05-31 🍷

Tröbs Hans-Martin/Zemp Armin

Forschungsplattform zur Entwicklung von Leichtbau-Deckensystemen. Herbsttagung der Schweizerischen Gesellschaft für Akustik SGA-SSA, Sursee, 11-08 🍷

Van Damme Bart/Kotak Parth/Hannema Gwenael/Zemp Armin

Bending waves in a checkerboard phononic crystal. NOVEM 2018, Ibiza, ES, 05-07 to 05-09 🍷

Van Damme Bart

Reduced sound and vibration transmission through inertia-amplification metamaterial panels. DENORMS workshop, Leuven, BE, 02-05 to 02-07 🍷

Van Damme Bart/Hannema Gwenael/Zemp Armin

Sound transmission through checkerboard sandwich panels. ISMA 2018, Leuven, BE, 09-17 to 09-19 🍷

Zellmann Christoph

Aircraft Noise Annoyance: management (Session title). CEAS Workshop "Future Aircraft Design and Noise Impact", NLR Amsterdam, NL, 09-06 to 09-07 ▲

Zellmann Christoph/Jäger David/Schlatter Felix

Model Adjustment and Validation to Account for the Airflow Deflector Retrofit of the A320 Family. Euronoise 2018, Crete, GR, 05-28 to 05-31 🍷

Zemp Armin/Van Damme Bart/Morin Benjamin

Effects of Material Properties on Fluid-Structure Interactions in Brass Instruments Part 1: Experimental Investigation. Fifth Romantic Brass Symposium, Biel, 11-20 to 11-21 🍷

Zemp Armin/Morin Benjamin/Van Damme Bart

Experimental Determination and Artificial Reproduction of Mouthpiece Pressure Fluctuations in Brass Wind Instruments. Fifth International Romantic Brass Symposium, Biel, 11-20 to 11-22 🍷

Billeter Emanuel

CO2 reduction by bulk Hydrogen. LightChEC Discussions UZH, Zürich, 08-02 🍷

Billeter Emanuel

Operando Spectroscopy in Catalysis. Empa PhD Gathering, Dübendorf, 09-25 🍷

Billeter Emanuel

Operando Spectroscopy in Catalysis. IfC-B Seminar, UZH, Zürich, 10-08 🍷

Billeter Emanuel/Terreni Jasmin/Borgschulte Andreas

Combined thermodynamic and catalytic measurement of CO2 reduction by PdHx. LightChEC Summerschool 2018, Les Diablerets, 08-19 to 11-22 🍷

Bleiner Davide

Advanced Analytical Technologies for Gemstones. Seminar at SSEF, Scwh. Stift. für Edelstein Forschung, Basel, 05-02 🍷 ○

Bleiner Davide

Instrumental Chemical Analysis: Users or Developers? Antrittsvorlesung PD, Universität Zürich, 06-02 🍷 ○

Bleiner Davide

XUV photo-ionization mass spectrometry to overcome the "LOD vs space resolution" trade-off. Seminar at Masaryk University in Brno, CZ, Masaryk University in Brno, CZ, 05-17 🍷 ○

Bleiner Davide

A new brilliant Tool in Materials Chemistry. International Conference on X-ray Lasers, Prague, CZ, 10-07 to 10-12 🍷 ○

Bleiner Davide

Extreme ultraviolet Mass Spectrometry to overcome the "LOD vs. Space Resolution" trade-off. SCIX Meeting of the Federation of Analytical Chemistry and Spectroscopy Sciences, Atlanta, US, 10-21 to 10-26 🍷 ○

Bleiner Davide/Arbelo Yunieski/Mueller Rafael/Patzke Greta/Kuznetsov Ilya/Menoni Carmen/Rocca Jorge

Laser Ionization Mass Spectrometry (LIMS) for High Space-Resolution Stoichiometric Microanalysis. Winter Conference on Plasma Spectrochemistry, Amelia Island, US, 01-06 to 01-12 🍷 ○

Borgschulte Andreas

Applied Spectroscopy: a balancing act over the abyss between physics and chemistry. CMSZH Graduate School Retreat 2018, Evolene, 01-17 to 01-21 🍷 ○

Borgschulte Andreas

Observing Chemical Reactions by Time-resolved High-resolution Neutron Imaging. Latsis Hydrogen & Energy Symposium, Lausanne, 02-11 to 02-15 🍷

Borgschulte Andreas

Poisonous water – engineering water coverage improves CO2 reduction catalysts. LightCheC Symposium and SummerSchool 2018, Diableret, 08-19 to 08-23 🍷 ○

Borgschulte Andreas/Terreni Jasmin/Patterson Bruno

Renewable synthetic fuels by electro- or thermo-catalysis? Seminar Series of the EPFL "Highlights in Energy Research", Sion, 03-01 🍷 ○

Borgschulte Andreas/Terreni Jasmin/Sambalova Olga/Delmelle Renaud/Heel Andre/Trtik Pavel/Lehmann Eberhard/Bleiner Davide

Observing Chemical Reactions by Time-resolved High-resolution Neutron Imaging. SCS Fall Meeting 2018, Lausanne, 09-07 🍷

Driesen Charlotte/Bogdal Christian/Nowack Bernd/Scheringer Martin/Hess Hans Dieter/Zenneg Markus

Transgenerational Fate Modeling of Polychlorinated Biphenyls in Cattle. IBP PhD Congress 2018, CHN Building (ETH Zentrum) Zürich, 04-06 🍷

Driesen Charlotte/Bogdal Christian/Nowack Bernd/Scheringer Martin/Hess Hans Dieter/Zenneg Markus

Transgenerational Fate Modeling of Polychlorinated Biphenyls in Cattle. SCS Fall Meeting 2018, Lausanne EPFL, 09-07 🍷

Driesen Charlotte/Bogdal Christian/Scheringer Martin/Hess Hans Dieter/Nowack Bernd/Zenneg Markus

Transgenerational Fate Modeling of Polychlorinated Biphenyls in Cattle. Empa PhD Symposium, Empa Dübendorf, 11-26 🍷

Figi Renato

Nichtmetall-Analysen (C,O,N,H) als unverzichtbare Helfer in der Röntgenfluoreszenz-Analytik. LECO Anwender-treffen Nichtmetall-Analytik, Berlin, DE, 01-10 to 01-11 🍷 ○

Heeb Norbert

Chemistry-based assessment of combustion exhausts. Focus Event: Effect- and toxicity-based assessment of exhausts, Dübendorf, 03-16 🍷 ○

Heeb Norbert

DeNox Technologien auf der Strasse: Ist "adblue" noch nicht grün genug? 2. Sonderkolloquium: Stickstoffdioxid: Ist der Diesel noch zu retten?, Frankfurt, DE. 2017-12-05 🍷 ○

Heeb Norbert

Secondary emissions – the need and the challenge to protect human health. 9th VERT Forum: 20 years of VERT emission control certification, Dübendorf, 03-15 🍷 ○

Heeb Norbert

Focus Event: Effect- and toxicity-based assessment of exhausts, Dübendorf, 03-16 ▲

Heeb Norbert

Focus Event: Effect- and toxicity-based assessment of exhausts, Dübendorf, 03-16 ■

Heeb Norbert

9th VERT Forum: 20 years of VERT emission control certification, Dübendorf, 03-15 ■

Heeb Norbert

Nitration chemistry in non-catalyzed diesel particle filters. 22nd ETH Conference on Combustion Generated Nanoparticles, Zürich, 06-18 to 06-21 🍷 ○

Heeb Norbert

22nd ETH Conference on Combustion Generated Nanoparticles, Zürich, 06-18 to 06-21 ■

Heeb Norbert

22nd ETH Conference on Combustion Generated Nanoparticles, Zürich, 06-18 to 06-21 ▲

Munoz Maria/Brem Benjamin/Durdina Lukas/Elser Miriam/Haag Regula/Wyss Simon/Heeb Norbert

Thrust-dependent PAH emissions of an in-service turbofan jet engine. 22nd ETH Conference on Combustion Generated Nanoparticles, Zürich, 06-18 to 06-21 🍷

Muñoz Fernandez Maria/Haag Regula/Mohn Joachim/Zeyer Kerstin/Czerwinski Jan/Comte Pierre/Heeb Norbert

Are GDI exhaust more dangerous than current diesel exhaust? SAG Meeting at University Bern, Bern, 11-05 🍷 ○

Muñoz Fernandez Maria/Haag Regula/Mohn Joachim/Zeyer Kerstin/Czerwinski Jan/Comte Pierre/Heeb Norbert

Chemical assessment of genotoxic emissions from gasoline direct injection vehicles. Clariant chem day, Basel, 10-04 🍷

Muñoz Fernandez Maria/Haag Regula/Mohn Joachim/Zeyer Kerstin/Czerwinski Jan/Comte Pierre/Heeb Norbert/Bleiner Davide

Comparison of genotoxic potentials of current diesel and gasoline vehicle exhaust and impact of filters. SCS Fall Meeting Lausanne, Lausanne EPFL, 09-07

Muñoz Fernandez Maria/Haag Regula/Mohn Joachim/Zeyer Kerstin/Czerwinski Jan/Comte Pierre/Heeb Norbert

Comparison of genotoxic potentials of diesel and gasoline exhaust. 9th VERT FORUM, VERT Empa Dübendorf, 03-15

Muñoz Fernandez Maria/Haag Regula/Mohn Joachim/Zeyer Kerstin/Czerwinski Jan/Comte Pierre/Heeb Norbert

The co-release of genotoxic PAHs and nanoparticles from GDI vehicles Support the Trojan Horse effect. 22nd ETH Conference on Combustion Generated Nanoparticles, ETH Zürich, 06-18 to 06-21

Schinkel Lena/Bogdal Christian/Yuan Bo/Heeb Norbert

Analysis of chlorinated paraffins: The analytical nightmare. MTM Seminar, Örebro, SE. 2017-12-08

Schinkel Lena/Canonica Elia/Bogdal Christian/Heeb Norbert

SCCPs in plastic: Pattern deconvolution with single-chain CP mixtures. CWG "Chlorinated Paraffins" by EURL, Freiburg, DE, 10-17

Schinkel Lena/Lehner Sandro/Knobloch Marco/Bogdal Christian/Cariou Ronan/Marchand Philippe/McNeill Kristopher/Heeb Norbert

The Analytical Nightmare: Dealing with Strong Mass Interferences of Chlorinated Paraffins and Their Transformation Products, Chlorinated Olefins. ACES Seminar, Stockholm, SE. 2017-12-05

Schinkel Lena/Lehner Sandro/Knobloch Marco/Bogdal Christian/Cariou Ronan/Marchand Philippe/McNeill Kristopher/Heeb Norbert

The Analytical Nightmare: Dealing with Strong Mass Interferences of Chlorinated Paraffins and Their Transformation Products, Chlorinated Olefins. Environmental Chemistry Group Seminar, IBP, ETH Zurich, Zürich, 01-30

Schinkel Lena/Bogdal Christian/Canonica Elia/McNeill Kristopher/Heeb Norbert

The CP/CO problem with GC-ECNI-MS & SCCPs in plastic. Environmental Chemistry Group Seminar, IBP, ETH Zürich, Zürich, 11-13

Schinkel Lena/Knobloch Marco/Bogdal Christian/Lienemann Peter/McNeill Kristopher/Heeb Norbert

Transformation of chloroparaffins to chloroolefins during metal drilling. Empa PhD Students' Symposium 2018, Dübendorf, 11-26

Schinkel Lena/Knobloch Marco/Bogdal Christian/Lienemann Peter/McNeill Kristopher/Heeb Norbert

Transformation of chloroparaffins to chloroolefins during metal drilling. SCS Fall Meeting, Lausanne, 09-07

Schinkel Lena/Knobloch Marco/Bogdal Christian/Lienemann Peter/McNeill Kristopher/Heeb Norbert

Transformation of chloroparaffins to chloroolefins during metal drilling. IBP PhD Congress, Zürich, 04-06

Schinkel Lena/Bogdal Christian/Cariou Ronan/McNeill Kristopher/Heeb Norbert

In-source fragmentation of chlorinated paraffins impedes the analysis of chlorinated olefins by GC-ECNI-MS. CHA-analysis, Beatenberg, 04-12 to 04-13

Schinkel Lena/Bogdal Christian/McNeill Kristopher/Heeb Norbert

The CP/CO problem: Limitations of conventional GC-ECNI-MS when analyzing mixtures of chlorinated paraffins (CPs) and chlorinated olefins (COs). DIOXIN symposium, Kraków, PL, 08-25 to 08-31

Schinkel Lena/Knobloch Marco/Bogdal Christian/Lienemann Peter/McNeill Kristopher/Heeb Norbert

Transformation of chloroparaffins to chloroolefins during metal drilling. DIOXIN symposium, Kraków, PL, 08-25 to 08-31

Setyan Ari/Bührer Tobias/Leuzinger Florence/Netkueakul Woranan/Patrick Michael/Heeb Norbert/Haag Regula/Wang Jing

Physico-chemical characterization of particles and volatile organic compounds emitted by e-cigarettes and heat-not-burn products, compared to a reference tobacco cigarette. International Aerosol Conference, St. Louis, MO, US, 09-02 to 09-07

Setyan Ari/Bührer Tobias/Leuzinger Florence/Netkueakul Woranan/Patrick Michael/Heeb Norbert/Haag Regula/Wang Jing

Physico-chemical characterization of particles and volatile organic compounds emitted by e-cigarettes and heat-not-burn products, compared to a reference tobacco cigarette. International Aerosol Conference, St. Louis, MO, US, 09-02 to 09-07

Setyan Ari/Bührer Tobias/Leuzinger Florence/Netkueakul Woranan/Patrick Michael/Heeb Norbert/Haag Regula/Wang Jing

Physico-chemical characterization of particles and volatile organic compounds emitted by e-cigarettes and heat-not-burn products, compared to a reference tobacco cigarette. Aerosol Technology, Bilbao, ES, 06-17 to 06-21

Setyan Ari/Kuo Yu-Ying/Brem Benjamin/Durdina Lukas/Gerecke Andreas/Heeb Norbert/Haag Regula/Wang Jing

The impact of the fuel chemical composition on volatile organic compounds emitted by an in-service aircraft gas turbine engine. AGU Fall Meeting, New Orleans, LA, US. 2017-12-11 to 2017-12-15

- Setyan Ari/Sauvain Jean-Jacques/Riediker Michael/Guillemain Michel/Rossi Michel**
The surface chemical reactivity of particles and its impact on human health. AGU Fall Meeting, New Orleans, LA, US, 2017-12-11 to 2017-12-15 ● ○
- Setyan Ari**
International Aerosol Conference, St. Louis, MO, US, 09-02 to 09-07 ▲
- Sterzi Andrea/Borgschulte Andreas/Bleiner Davide**
Photon energy- and time-dependent Raman study of aqueous organic compounds. RFA NAREP + Energy Colloquium, Empa, Dübendorf, 02-05 ●
- Sterzi Andrea/Sambalova Olga/Sterzi Andrea/Arbelo Pena Yunieski/Delmelle Renaud/Cirelli Claudio/Patterson Bruce/Barbato Francesco/Bleiner Davide**
Probing hydrogen in materials with operando membrane-based X-ray absorption spectroscopy. SAOG (Surface Science and Thin Films Community of Switzerland) Annual Meeting 2018, Fribourg, 02-14 ◆
- Terreni Jasmin/Wenger Andrina/Holzner Reto/Borgschulte Andreas**
Optical emission from catalytic combustion of CH₃OH/air on Yb₂O₃ supported metal catalysts. SAOG Meeting, Fribourg, 02-01 ◆
- Terreni Jasmin/Wenger Andrina/Holzner Reto/Borgschulte Andreas**
Closing the carbon cycle with methanol; synthesis and energy conversion. Symposium and Summerschool Light Chec, Les Diablerets, 08-19 to 08-23 ◆
- Terreni Jasmin/Wenger Andrina/Holzner Reto/Borgschulte Andreas**
Optical emission from catalytic combustion of CH₃OH/air on Yb₂O₃ supported metal catalysts. CIMTEC, Perugia, IT, 06-10 to 06-14 ●
- Terreni Jasmin/Patterson Bruce/Borgschulte Andreas**
Sorption Enhanced Methanol Synthesis. Latsis Symposium, 12th International Symposium Hydrogen and Energy, Lausanne, 02-11 to 02-16 ◆
- Trottmann Matthias/Matthias Trottmann/Adrian Wichser/Martin Arnold/Davide Bleiner**
Space resolved laser microanalysis of Potassium & Iodine in Laccase-catalysed woods. SCS Fall Meeting 2018, École Polytechnique Fédérale de Lausanne (EPFL), 09-07 ◆
- Trottmann Matthias/Matthias Trottmann/Jörg Niderberger/Adrian Wichser/Jürgen Bauhus/Davide Bleiner**
3D Dendrology by Automated Laser-microanalysis for High-Resolution Eco-Monitoring. 13. Symposium „Massenspektrometrische Verfahren der Elementspurenanalyse“, Berlin Adlershof, DE, 09-03 to 09-06 ●
- Wang Jing**
Filtration as a method for emission control and personal protection. Joint conference of American Geophysical Union – Chinese Academy of Sciences, Xi'an, CN, 10-15 to 10-18 ● ○
- Wang Jing**
Health risks of nanocomposites based on carbon and metal oxide nanomaterials. AsianNano 2018, Qingdao, CN, 10-18 to 10-21 ● ○
- Zennegg Markus**
Dioxins and PCBs in Meat – Still a Matter of Concern? Seminar am Institut für Chemie und Biologische Chemie (ICBT), University of Applied Sciences Wädenswil, 11-07 ● ○
- Bereiter Bernhard**
Signal preservation in an “Oldest Ice Core”: Problems we might face in extremely thinned and old ice. Oldest ice workshop, Davos, 06-18 ● ○
- Bereiter Bernhard/Tuzson Béla/Scheidegger Philipp/Emmenegger Lukas/Maechler Lars/Schmitt Jochen/Fischer Hubertus/**
High-precision trace gas measurements in air samples from ice cores using a dual-QCL laser absorption spectrometer. FLAIR 2018 Conference, Assisi, IT, 09-10 to 09-14 ◆
- Bereiter Bernhard/Shackleton Sarah/Baggenstos Daniel/Kawamura Kenji/Severinghaus Jeff/**
Mean Global Ocean Temperatures during the Last Glacial Transition. Polar 2018 Conference, Davos, 06-19 to 06-23 ●
- Bereiter Bernhard/Tuzson Béla/Scheidegger Philipp/Emmenegger Lukas/Maechler Lars/Schmitt Jochen/Fischer Hubertus/**
Towards gas measurements in extremely thinned ice: the mid-IR laser spectrometer. Polar 2018 Conference, Davos, 06-19 to 06-23 ◆
- Brunner Dominik/Kuhlmann Gerrit/Clément Valentin/Fuhrer Oliver/Marshall Julia/Meijer Yasjka/Löscher Armin**
The ESA project SMARTCARB: Atmospheric CO₂ simulations to study the capability of future imaging CO₂ satellites to observe emissions from cities and power plants. COSMO User seminar, MeteoSwiss, 01-15 ●
- Brunner Dominik/Müller Michael/Jähn Michael/Graf Peter/Meyer Jonas/Hügli Christoph/Pentina Anastasia/Perez-Cruz Fernando/Emmenegger Lukas**
A low-cost sensor network to monitor the CO₂ emissions of the city of Zurich. ICOS Second Science Conference, Prague, CZ, 09-11 to 09-13 ●

<p>Brunner Dominik Bridging the gap between bottom-up and top-down methods. ICOS Second Science Conference, Prague, CZ, 09-11 to 09-13 ▲</p>
<p>Brunner Dominik/Henne Stephan/Reimann Stefan/Steinbacher Martin/Mohn Joachim/Emmenegger Lukas Top-down emission estimation to support national inventories:A Swiss perspective. First IG3IS Symposium, Geneva, 11-13 to 11-15 ● ○</p>
<p>Brunner Dominik/Kuhlmann Gerrit/Clément Valentin/Fuhrer Oliver/Marshall Julia/Meijer Yasjka/Löscher Armin/Broquet Grégoire Use of NO2 and CO satellite observations to estimate CO2 emissions from cities and power plants with a future European satellite ESA Project SMARTCARB. European Geophysical Union (EGU) General Assembly 2018, Vienna, AT, 04-09 to 04-13 ●</p>
<p>Brunner Dominik/Kuhlmann Gerrit/Marshall Julia/Clément Valentin/Schnadt-Poberaj Christina/Marshall Julia/Fuhrer Oliver/Broquet Grégoire use of satellite measurements of auxiliary reactive trace gases for fossil fuel carbon dioxide emission estimation. SMARTCARB final review meeting, ESA ESTEC, NL, 03-07 to 03-08 ●</p>
<p>Eggleston Sarah/Rupacher Joanna/Toyoda Sakae/Moossen Heiko/Biasi Christina/Yu Longfei/Kantnerova Kristyna/Yoshida Naohiro/Brewer Paul/Mohn Joachim Development of international N2O reference materials for site preference measurements. Arbeitsgemeinschaft Stabile Isotope Jahrestagung 2018, Burghausen, DE, 09-30 to 10-03 ●</p>
<p>Eggleston Sarah/Toyoda Sakae/Moossen Heiko/Biasi Christina/Jacksier Tracey/Yu Longfei/Yoshida Naohiro/Brewer Paul/Mohn Joachim Development of new N2O reference materials for d15N, d18O and 15N site preference within the EMPIR project SIRS. European Geophysical Union General Assembly 2018, Vienna, AT, 04-08 to 04-13 ●</p>
<p>Eggleston Sarah/Cartapanis Olivier/Jaccard Samuel/Galbraith Eric Global foraminifera d13C database to assess changes in the efficiency of the soft tissue pump on glacial-interglacial timescales. European Geophysical Union General Assembly 2018, Vienna, AT, 04-08 to 04-13 ◆</p>
<p>Emmenegger Lukas A Low-cost CO2 Sensor Network at Regional and Urban Scale. EGU, Vienna, AT, 04-08 to 04-13 ●</p>
<p>Emmenegger Lukas CO2 Monitoring with Low-Cost sensor: Performance, Calibration and Carbosense Network Integration. Air Quality Conference, Barcelona, ES, 03-12 to 03-15 ●</p>
<p>Emmenegger Lukas Combining dual-wavelength DFB quantum cascade lasers for multi-species trace gas spectroscopy. FLAIR, Assisi, IT, 09-10 to 09-14 ●</p>
<p>Emmenegger Lukas Mid-IR Laser Spectroscopy in Life Sciences: Medical and Forensic Applications. Optical Sensing, Zürich, 07-02 to 07-05 ●</p>
<p>Emmenegger Lukas QCL Absorption Spectroscopy for Lightweight and Multi-Species Environmental Applications. OSA Photonics for Energy and Environment, Singapore, SG, 11-04 to 11-08 ●</p>
<p>Fischer Andrea RFA Colloquium Natural Resources and Pollutants + Energy, Dübendorf. 2016-01-01 to 12-31 ■</p>
<p>Frege Carla/Steinbacher Martin/Schwarzenbach Beat NOx measurements at Jungfraujoch and Rigi. ACTRIS-2 WP3 Trace Gases Meeting, Douai, FR, 05-16 to 05-18 ●</p>
<p>Gianella Michele/Onel Lavinia/Brennan Alexander/Ronnie Grace/Lawry Aguilera Ana/Hancock Gus/Whalley Lisa/Seakins Paul W/Ritchie Grant A D/Heard Dwayne Hydroperoxyl measurements in an atmospheric reactor: comparison of CRDS and FAGE. FLAIR 2018, Assisi, IT, 09-10 to 09-14 ●</p>
<p>Graf Manuel/Tuzson Béla/Emmenegger Lukas/ Lightweight spectrometer for upper tropospheric water vapour measurements featuring a segmented circular multipass cell. FLAIR-2018, Assisi, IT, 09-10 to 09-14 ◆</p>
<p>Graf Manuel/Tuzson Béla/Emmenegger Lukas/ Optically stable circular multipass cell for compact and lightweight absorption spectroscopy. EGU-2018, Vienna, AT, 04-08 to 04-13 ●</p>
<p>Henne Stephan/Brunner Dominik/Mohn Joachim/Leuenberger Markus/Meinhardt Frank/Steinbacher Martin/Emmenegger Lukas Inverse Modelling of Swiss CH4 and N2O Emissions. 3rd ICOS Science Conference, Prague, CZ, 09-11 to 09-13 ◆</p>
<p>Henne Stephan/Mohn Joachim/Leuenberger Markus/Meinhardt Frank/Steinbacher Martin/Vollmer Martin K./Reimann Stefan/Emmenegger Lukas/Brunner Dominik Top-down Validation of Swiss non-CO2 Greenhouse Gas Emissions. IG3IS – TRANSCOM meeting, Lund, SE, 09-17 to 09-20 ●</p>

Hill Matthias/Reimann Stefan

The new web-based QA assurance tool for VOC submission to EBAS. ACTRIS-2 WP3 Trace Gases Meeting, Douai, FR, 05-16 to 05-18 🍷

Hueglin Christoph/Bigi Alessandro/Mueller Michael/Grange Stuart/Ghermandi Grazia

Assessment of the Performance of NO and NO2 low cost sensors over extended time periods in a real world application. Air Sensors International Conference, Oakland, US, 09-12 to 09-14 🍷

Hueglin Christoph/Grange Stuart/Carslaw David/

PM10 trends in Switzerland using random forest models. 11th International Conference on Air Quality, Barcelona, ES, 03-12 to 03-16 🍷

Hueglin Christoph/Boleti Eirini/Takahama Satoshi

Trend Assessment and Clustering of Tropospheric Ozone Concentrations in Europe based on Time Scale Decomposition. 11th International Conference on Air Quality, Barcelona, ES, 03-12 to 03-16 🍷

Hueglin Christoph/Grange Stuart/Carslaw David

Trends analysis of PM10 using Random Forest Models. 19th Task Force on Measurement and Modelling Meeting, Geneva, 05-02 to 05-04 🍷

Hundt Morten/Kapsalidis Filippos/Shahmohammadi Mehran/Liu Chang/Scheidegger Philipp/Aseev Oleg/Tuzson Bela/Looser Herbert/Faist Jerome/Emmenegger Lukas/

Multi-Component Environmental Gas Sensing using Dual-Wavelength Quantum Cascade Lasers. EGU-2018, Vienna, AT, 04-08 to 04-13 🍷

Ibraim Erkan/Henne Stephan/Wei Jing/Sarah Eggleston/Yu Longfei/Tuzson Béla/Emmenegger Lukas/Mohn Joachim

Disentangling N2O emitting source processes with field-scale online measurements of the four most abundant N2O isotopocules. Swiss Global Change Day 2018, Bern, 04-19 🍷

Ibraim Erkan/Henne Stephan/Wei Jing/Sarah Eggleston/Yu Longfei/Tuzson Béla/Emmenegger Lukas/Mohn Joachim

Disentangling N2O emitting source processes with field-scale online measurements of the four most abundant N2O isotopocules. EGU 2018, Vienna, AT, 04-08 to 04-13 🍷

Kantnerova Kristyna/Tuzson Béla/Emmenegger Lukas/Bernasconi Stefano M./Mohn Joachim

Clumped N2O isotopes analysis by mid-IR laser spectroscopy. Empa PhD Symposium, Dübendorf, 11-26 🍷

Kantnerova Kristyna/Tuzson Béla/Emmenegger Lukas/Bernasconi Stefano M./Mohn Joachim

Clumped N2O isotopes by mid-IR laser spectroscopy. SCS Fall Meeting 2018, Lausanne, 09-07 🍷

Kantnerova Kristyna/Tuzson Béla/Emmenegger Lukas/Bernasconi Stefano M./Mohn Joachim

Clumped isotopes in nitrous oxide: Development of a spectroscopic method. Summer school "Stable isotopes in ancient & contemporary environments", Konstanz, DE, 04-15 to 04-19 🍷

Kantnerova Kristyna/Tuzson Béla/Emmenegger Lukas/Bernasconi Stefano M./Mohn Joachim

Clumped N2O isotopes by mid-IR laser spectroscopy. ASI 2018, Burghausen, DE. 2017-09-30 to 10-03 🍷

Kantnerova Kristyna/Ibraim Erkan/Tuzson Béla/Emmenegger Lukas/Bernasconi Stefano M./Mohn Joachim

Singly and doubly substituted isotopocules of nitrous oxide and their application in environmental studies. MASST-WIN Exploratory Workshop, Halle (Salle), DE, 11-14 to 11-16 🍷 ○

Kantnerova Kristyna/Tuzson Béla/Emmenegger Lukas/Bernasconi Stefano M./Mohn Joachim

Site-specific analysis of N2O clumped isotopic species by laser spectroscopy. EGU 2018, Vienna, AT, 04-08 to 04-13 🍷

Maechler Lars/Bereiter Bernhard/Scheidegger Phillip/Walther Remo/Tuzson Béla/Schmitt Jochen/Emmenegger Lukas/Fischer Hubertus/

Towards gas measurements in extremely thinned ice with sublimation extraction and mid-IR spectrometry. 16th Swiss Geoscience Meeting, Bern, 11-30 to 12-01 🍷

Maechler Lars/Bereiter Bernhard/Tuzson Béla/Emmenegger Lukas/Walther Remo/Schmitt Jochen/Fischer Hubertus/

Towards Gas Measurements in Extremely Thinned Ice: Sublimation Extraction. Polar 2018 Conference, Davos, 06-19 to 06-23 🍷

Mohn Joachim

Laser based analysis of greenhouse gas stable isotopes. Workshop on stable isotope research in terrestrial ecology, WSL Birmensdorf, 05-24 🍷 ○

Mohn Joachim/Zeyer Kerstin/Schrade Sabine

A dual tracer ratio method for comparative emission measurements in an experimental dairy housing. Training School COST Action LivAGE, Tänikon, 04-17 to 04-18 🍷 ○

Mohn Joachim/Harris Stephen/Liisberg Jesper/Wolf Benjamin/Xia Longlong/Yu Longfei/Wei Jing/Zeyer Kerstin/Kelly Bryce/Blunier Thomas

Comparison of N2O isotope spectrometers for high-precision measurements in ambient air and incubation experiments. ASI 2018, Jahrestagung der Arbeitsgemeinschaft Stabile Isotope, Raitenhaslach, DE, 09-30 to 10-03 🍷

<p>Mohn Joachim/Toyoda Sakae/Moossen Heiko/Biasi Christina/Jacksier Tracey/Eggleston Sarah/Yu Long-fei/Yoshida Naohiro/Brewer Paul Development of new N2O reference materials for d15N, d18O and 15N site preference within the EMPIR project SIRS. 9th International Symposium on Isotopomers (ISI 2018), Baton Rouge, US, 03-25 to 03-28 ◆</p>
<p>Mohn Joachim Session Chair. 9th International Symposium on Isotopomers (ISI 2018), Baton Rouge, US, 03-25 to 03-28 ▲</p>
<p>Mohn Joachim/Kantnerová Kristýna/Tuzson Béla/Emmenegger Lukas/Bernasconi Stefano M Site-specific analysis of N2O clumped isotopic species by laser spectroscopy. 9th International Symposium on Isotopomers (ISI 2018), Baton Rouge, US, 03-25 to 03-28 ●</p>
<p>Mohn Joachim/Kantnerová Kristýna/Tuzson Béla/Emmenegger Lukas/Bernasconi Stefano M Site-specific analysis of N2O clumped isotopic species by laser spectroscopy. European Geosciences Union General Assembly 2018, Vienna, AT, 04-08 to 04-13 ◆</p>
<p>Mueller Michael The Carbosense network – Sensor calibration, network operation and data analysis. [ADASen] Lunch seminar, Duedendorf, 08-30 ● ○</p>
<p>Mueller Michael/Hueglin Christoph Assessment of the performance of NO and NO2 low cost sensors over extended time periods. Individual air pollution sensors: innovation or revolution?, Lille, FR, 11-29 to 11-30 ◆</p>
<p>Mueller Michael/Berchet Antoine/Graf Peter/Meyer Jonas/Brunner Dominik/Hueglin Christoph/Emmenegger Lukas CO2 Monitoring with low-cost Sensors: Performance, Calibration and Carbosense Network Integration. 11th International Conference on Air Quality – Science and Application, Barcelona, ES, 03-12 to 03-16 ●</p>
<p>Pieber Simone Maria/Kambolis Anastasios/Ferri Davide/Bhattu Deepika/Bruns Emily/Elsener Martin/Kröcher Oliver/Prévôt André/Baltensperger Urs Aromatic Hydrocarbon Conversion through Catalytic Converters Significantly Reduces Secondary Organic Aerosol Formation from Wood Burning Emissions. ETH Nanoparticle Conference 2018, Zurich, 06-20 ●</p>
<p>Pieber Simone Maria Organic compounds emitted from a ship engine characterized by online PTR-ToF-MS and offline TD-GC-MS: implications for atmospheric processing. POLAR 2018, Davos, 06-22 ◆</p>
<p>Pieber Simone Maria/Brunner Dominik/Henne Stephan/Steinbacher Martin/Tuzson Béla/Emmenegger Lukas A decade of continuous atmospheric CO2 isotope ratio measurements at Jungfraujoch. Swiss Geoscience Meeting 2018, Bern, 11-30 to 12-01 ●</p>
<p>Pieber Simone Maria Atmospheric processing by OH and NO3 radicals and the secondary organic aerosol formation of residential solid fuel burning emissions using bituminous coal as an example. International Aerosol Conference 2018, St. Louis, US, 09-03 to 09-07 ●</p>
<p>Reimann Stefan Measurement of F-gases and OVOCs: a need for traceable, high-accuracy standards in climate and air pollution research. EMPIR sifting meeting, Paris, FR, 10-24 ●</p>
<p>Reimann Stefan Underestimated fossil emissions for ethane and propane related to global observation. AGAGE meeting, Beijing, CN, 05-07 to 05-11 ●</p>
<p>Reimann Stefan ACTRIS-Interim ACTRIS Council, Zurich/iDübendorf Akademie, 06-07 to 06-08 ■</p>
<p>Reimann Stefan/Lund-Myhrre Catrin/Punjabi Shalini Underestimated fossil emissions for ethane and propane related to global observation. ACTRIS general meeting, Nafplio, GR, 04-16 to 04-19 ●</p>
<p>Shackleton Sarah Ann /Bereiter Bernhard/Baggenstos Daniel/Severinghaus Jeffrey P/ Is the rate of ocean warming during the Younger Dryas overestimated? AGU 2018 Fall Meeting, Washington D.C., US, 12-10 to 12-14 ●</p>
<p>Steinbacher Martin Empa's contribution to GEO / GEOSS. Nationale Koordinationssitzung GEO/GEOSS, Bern, 05-16 ●</p>
<p>Steinbacher Martin Jungfraujoch and the Integrated Carbon Observation System. HFSJG Users Meeting, Bern, 08-23 ●</p>
<p>Steinbacher Martin Long-term Time Series, Quality Assurance and Control — Atmospheric Composition. 15th National GCOS Roundtable, Bern, 01-25 ●</p>
<p>Steinbacher Martin Quality Assurance and Quality Control for Trace Gas Observations within GAW. Meeting of the GAW Science Advisory Group for Aerosols, Geneva, 07-09 to 07-11 ●</p>
<p>Steinbacher Martin ICOS Atmospheric Monitoring Station Assembly, Jena, DE, 06-05 to 06-07 ■</p>

Steinbacher Martin/Anet Julien/Emmenegger Lukas/Buchmann Brigitte	Continuous atmospheric greenhouse gas measurements in a semi-remote area in the Kyrgyz Republic – first scientific findings towards policy making. 3 rd ICOS Science Conference, Prague, CZ, 09-11 to 09-13 🍷
Steinbacher Martin/Henne Stephan/Brunner Dominik/Emmenegger Lukas	Importance of high-quality long-term atmospheric trace gas observations within IG3IS. First IG3IS Symposium and User Summit, Geneva, 11-13 to 11-15 ♦
Steinbacher Martin/Zellweger Christoph/Emmenegger Lukas/Buchmann Brigitte	WMO/GAW Quality Assurance / Science Activity Centre Switzerland. GAW-CH Landesausschuss, Zurich, 10-31 🍷
Tuzson Béla/Stanicki Badrudin/Chang Liu/Graf Manuel/Scheidegger Philipp/Looser Herbert//Emmenegger Lukas/	A compact QCL absorption spectrometer for mobile, high-precision methane measurements aboard drones. FLAIR-2018, Assisi, IT, 09-10 to 09-14 🍷
Tuzson Béla/Looser Herbert/Felder Ferdinand/Bovey Fabian/Tappy Luc/Emmenegger Lukas/	Human Breath Acetone Analysis by Mid-IR Laser Spectroscopy: Development and Application. High-brightness Sources and Light-driven Interactions Congress, Strasbourg, FR, 03-26 to 03-28 🍷
Tuzson Béla/Aseev Oleg/Looser Herbert/Tappy Luc/Niederhauser Bernhard/Emmenegger Lukas/	Mid-IR Laser Spectroscopy in Life Sciences: Medical and Forensic Applications. OSA Advanced Photonics Congress, Zürich, 07-02 to 07-05 🍷
Vollmer Martin	Trace Gases in the Polar Atmosphere. Swiss Polar Day -- Side Meeting, ETH Zürich, 04-04 🍷 ○
Vollmer Martin/Bernard Francois/Mitrevski Blagoj/Steele L. Paul/Trudinger Cathy M./Reimann Stefan/Langenfelds Ray F./Krummel Paul B./Fraser Paul J./Burkholder James B.	Abundances, Emissions, and Loss Processes of Octafluorooxolane (c-C4F8O) in the Atmosphere. 57 th AGAGE Meeting, Beijing, CN, 05-06 to 05-12 🍷
Vollmer Martin/Reimann Stefan/Hill Matthias/Emmenegger Lukas	Halogenated Greenhouse Gases at Jungfraujoch and in AGAGE. VAO (Virtual Alpine Observatory) Symposium, Grenoble, FR, 03-13 to 03-15 🍷
Vollmer Martin/AGAGE Team	Minor Hydrochlorofluorocarbons HCFC-133a, HCFC-132b, and HCFC-31 --- Rebels Without a Cause. 58 th AGAGE Meeting, Boston, US, 10-07 to 10-12 🍷
wei jing/Erkan Ibrahim/Nicolas Brüggemann/Harry Vereecken/Joachim Mohn	First real-time isotopic characterization of N2O from chemodenitrification. EGU2018, Vienna, AT, 04-07 to 04-12 🍷
Zellweger Christoph/Brunner Dominik/Hüglin Christoph/Jähn Michael/Müller Michael/Emmenegger Lukas	Measurements in the GAW programme: From high-end to low-cost. "GAW-CH Landesausschuss" Fall Meeting, Zürich Flughafen, 10-31 🍷
Zellweger Christoph/Steinbacher Martin/Emmenegger Lukas/Buchmann Brigitte	World Calibration Centre WCC-Empa. "GAW-CH Landesausschuss" Fall Meeting, Zürich Flughafen, 10-31 to 🍷
Zellweger Christoph	Update on WCC-Empa activities. Meeting of the Science Advisory Group for Reactive Gases, Osaka, JP, 10-02 to 10-04 🍷
Bach Christian	Antriebskonzepte der Zukunft. Bioenergie Forum, Solothurn, DE, 04-17 🍷 ○
Bach Christian	Die Zukunft von Verbrennungsmotoren. Zyklische Prozesse, St. Gallen, 10-24 🍷 ○
Bach Christian	Synthetische Treibstoffe – Chancen und Risiken. Das Kleingedruckte zu den Antriebskonzepten von Morgen, Sursee, 09-18 🍷 ○
Bach Christian	Die post-fossile Mobilität. Automatisierte Mobilität – die Zukunft als Beifahrer, Zürich, 11-04 🍷 ○
Cabalzar Urs	Dank Power-to-Gas das ganze Jahr mit Sonnenenergie fahren. Gasmarkt Schweiz/Europa, Gasverbund Mittelland, GVM, Arlesheim, 03-29 🍷 ○
Cabalzar Urs	PtX: viability improvement by monetising the value of CO2-reduction. FLUXYS FORUM – The gas system: a major asset for a sustainable energy transition?, Brussels, BE, 04-23 🍷 ○
Cabalzar Urs	Wasserstoff heute und morgen – Marktübersicht, technischer Stand und Trends. Wasserstoff – Potential, Risiken und Chancen, Hotel Aarhof, Olten, 10-23 🍷 ○
Cabalzar Urs/Frischknecht Lukas/Bütler Thomas/Stadelmann Patrick	Die «move»-Phase 1 mit Wasserstoffherzeugung, Verdichtung und Betankung. Abschlussevent move Phase 1, Empa Duebendorf, 06-20 🍷

Kammermann Thomas/Merotto Laura/Soltic Patrik/Bach Christian/Bleiner Davide	Plasma-based In Cylinder Air-Fuel Equivalence Ratio Quantification for Gas Engines. 5 th SCCER Mobility, Swiss Competence Center for Energy Research, Efficient Technologies and Systems for Mobility, ETH Zurich, 09-11 ◆
Omanovic Andyn/Zsiga Norbert/Soltic Patrik/Schneider Wolfgang	FlexWork – Fully Variable and Efficient Valve Train for Internal Combustion Engines. SCCER Mobility Annual Conference, ETH Zurich, 09-11 ◆
Rojewski Jakub/Soltic Patrik/Manca di Villahermosa Giacomo/Daniel Klein Daniel/Gianetti Giovanni Gaetano/Lucchini Tommaso	CAE approach for optimizing EGR system in CNG powered engine. SCCER Mobility 5th Annual Conference, ETH Zurich, 09-11 ◆
Soltic Patrik	Advanced Combustion Process for Passenger Car Gas Engines. Reserach & Development in the Gas Industry: Focus on New and Future Technologies, EPFL Lausanne, 05-18 ● ○
Dimopoulos Eggenschwiler Panayotis	Characterization of particle emissions of Euro-6 passenger cars (CNG, gasoline, diesel). 47 th PMP Meeting, EC Joint Research Centre, IT, 05-16 to 05-18 ● ○
Dimopoulos Eggenschwiler Panayotis	Fluid Dynamic Characteristics of AdBlue Injection, Wall Impingement and influence on the SCR catalyst performance. 14 th International CTI Conference SCR Systems, Munich, DE, 07-05 to 07-06 ● ○
Liati Anthi/Durdina Lukas/Elser Miriam/Schönenberger David/Setyan Ari/Wyss Simon/Munoz Maria/Schreiber Daniel/Haag Regula/Rentsch Daniel/Mohn Joachim/Heeb Norbert/Wang Jing	Non-volatile Particulate Matter Mass and Number Emissions of an Aero Gas Turbine Fueled with Alternative Fuel Blends. 22 nd ETH Conference on Combustion Generated Particles, Zurich, 06-18 to 06-21 ●
Liati Anthi/Jonsdottir Hulda R./Delaval Mathilde/Leni Zaira/Keller Alejandro/Brem Benjamin T./Siegerist Frithjof/Schönenberger David/Burtscher Heinz/Geiser Marianne	Respiratory Health Effects of Non-Volatile Particle Emissions from an Aircraft Turbine Engine. American Thoracic Society 2018 International Conference, San Diego, CA, US, 05-18 to 05-23 ●
Merotto Laura/Kammermann Thomas/Bleiner Davide/Soltic Patrik	Ignition Diagnostics based on Spark-Induced breakdown Spectroscopy for Gas Engines. 4 th International Conference on Ignition Systems for Gasoline Engine Applications, Berlin, DE, 12-06 to 12-07 ●
Papetti Viola/Dimopoulos Eggenschwiler Panayotis	Additive Manufactured (AM) Open Cell Structures: Promising substrates for Automotive Catalysts. FKFS Veranstaltungen, Stuttgart, DE, 03-12 to 03-14 ● ○
Papetti Viola/Dimopoulos Eggenschwiler Panayotis	Additive Manufactured (AM) Open Cell Structures: Promising substrates for Automotive Catalysts. Two-day Meeting, Milan, IT, 02-22 to 02-23 ● ○
Zsiga Norbert/Omanovic Andyn/Soltic Patrik/Schneider Wolfgang	FlexWork – Lastregelung bei einem Motor mit elektrohydraulischem, vollvariablem Ventiltrieb. Ladungswechsel und Emissionierung, Stuttgart, DE, 10-23 to 10-24 ●
Asakura Ryo	Designing cathode composites for all-solid-state sodium batteries. Empa PhD Symposium 2018, Dübendorf, Empa, 11-26 ◆
Battaglia Corsin	Forschung Energiespeicherung an der Empa. Briefing Kantonsrat Zürich, Zürich, 07-02 ● ○
Battaglia Corsin	Materials innovation for next-generation batteries. 7 th Symposium of the SCCER Heat and Electricity Storage, Rapperswil, 11-06 ● ○
Battaglia Corsin	Materials innovation for next-generation batteries. EPFL Sion Seminar, Sion, 12-05 ● ○
Battaglia Corsin	Mg3Sb2-based thermoelectrics, a low(er)-cost alternative to Bi2Te3. BFE Waste Heat Recovery Trend Watching Meeting, Dübendorf, Empa, 09-20 ●
Battaglia Corsin/	BFE Waste Heat Recovery Trend Watching Meeting, Dübendorf, Empa, 09-20 to ■
Battaglia Corsin	A 3 V all-solid-state battery based on a closo-borate electrolyte. Third Bunsen Colloquium on Solid-State Batteries, Frankfurt, DE, 11-14 to 11-16 ◆
Battaglia Corsin	A high-voltage aqueous electrolyte for sodium-ion batteries. 234 th Meeting of the Electrochemical Society, Cancun, MX, 09-30 to 10-04 ●
Battaglia Corsin	A high-voltage aqueous electrolyte for sodium-ion batteries. Materials Research Society Spring Meeting 2018, Phoenix, US, 04-02 to 04-18 ●

<p>Battaglia Corsin A stable 3V all-solid-state battery based on a closoborate electrolyte. Materials Research Society Spring Meeting 2018, Phoenix, US, 04-02 to 04-18 🍷 ○</p>
<p>Battaglia Corsin A stable 3V all-solid-state battery based on a closoborate electrolyte. 234th Meeting of the Electrochemical Society, Cancun, MX, 09-30 to 10-04 🍷</p>
<p>Battaglia Corsin All-solid-state batteries based on closoborate electrolytes. Third Bunsen Colloquium on Solid-State Batteries, Frankfurt, DE, 11-14 to 11-16 🍷 ○</p>
<p>Battaglia Corsin Electrolytes for next-generation rechargeable batteries. 1st Swiss and Surrounding Battery Days, Baden, 05-23 to 05-25 🍷 ○</p>
<p>Battaglia Corsin Impact of Ni content on the thermoelectric properties of Half-Heusler TiNiSn. Materials Research Society Spring Meeting 2018, Phoenix, US, 04-02 to 04-18 🍷</p>
<p>Battaglia Corsin Impact of Ni content on the thermoelectric properties of Half-Heusler TiNiSn. 234th Meeting of the Electrochemical Society, Cancun, MX, 09-30 to 10-04 🍷</p>
<p>Battaglia Corsin Ion transport in (low)-dimensional ionic conductors. 234th Meeting of the Electrochemical Society, Cancun, MX, 09-30 to 10-04 🍷 ○</p>
<p>Battaglia Corsin Nanostructured Cu-Sn electrodes for actively and selectively converting CO₂ to CO. 234th Meeting of the Electrochemical Society, Cancun, MX, 09-30 to 10-04 🍷</p>
<p>Battaglia Corsin Status and perspectives of sodium batteries. EPFL Winterschool Challenges & Opportunities in Energy Research, Crans Montana, 03-19 to 03-20 🍷 ○</p>
<p>Battaglia Corsin 1st International Symposium on Solid-State Batteries, Empa Akademie, Dübendorf, 05-28 to 05-29 ■</p>
<p>Battaglia Corsin 1st Swiss and Surrounding Battery Days, Baden, 05-23 to 05-25 ■</p>
<p>Bay Marie-Claude Dominating factors controlling the ion conductivity of Na-b⁺-alumina ceramic electrolytes. Massachusetts Institute of Technology Seminar, Boston, US, 12-03 🍷 ○</p>
<p>Bay Marie-Claude Impact of liquid phase formation on microstructure and conductivity of Li-stabilized Na-b⁺ – alumina ceramics. RFA NAREP & Energy Seminar, Dübendorf, Empa, 11-05 🍷</p>
<p>Bay Marie-Claude Dominating factors controlling the ion conductivity of Na-b⁺-alumina ceramic electrolytes. Materials Research Society Fall Meeting 2018, Boston, US, 11-25 to 11-30 🍷</p>
<p>Bay Marie-Claude Enhancing the ion conductivity and mechanical stability of Na-b⁺ – alumina electrolytes by microstructural control. 1st Swiss and Surrounding Battery Days, Baden, 05-23 to 05-25 🍷</p>
<p>Duchêne Léo A 3V stable closoborate electrolyte for all-solid-state sodium-ion batteries. Materials Research Society Spring Meeting 2018, Phoenix, US, 04-02 to 04-18 🍷</p>
<p>Duchêne Léo A highly stable closoborate solid-state electrolyte for Na-ion batteries. Université de Genève, Physical Chemistry Department Colloquium, Geneva, 01-29 to 01-30 🍷</p>
<p>Duchêne Léo A stable 3V all-solid-state battery based on a closoborate electrolyte. 1st Swiss and Surrounding Battery Days, Baden, 05-23 to 05-25 🍷</p>
<p>Heinz Meike Grain size effects on activation energy & conductivity of b⁺ – alumina electrolytes. 2nd ZEBRA Battery Meeting, Mering, 10-18 to 10-19 🍷</p>
<p>Heinz Meike Recent advances in b⁺ – alumina ceramics for Na-batteries. 42nd International Conference and Expo on Advanced Ceramics and Composites, Daytona Beach, US, 01-21 to 01-26 🍷</p>
<p>Isler-Schmid Daniela 1st International Symposium on Solid-State Batteries, Empa Akademie, Dübendorf, 05-28 to 05-29 ■</p>
<p>Ju Wenbo Sn-decorated Cu for selective electrochemical CO₂ to CO conversion. RFA NAREP & Energy Seminar, Dübendorf, Empa, 12-10 🍷</p>

Kühnel Ruben-Simon	Aktueller Stand der Batterieforschung – Vom Lithium-Ionen-Akku bis zu neuen wasserbasierten Batteriekonzepten. ElectroSuisse Solarbatterien, Dietikon, 02-07 ● ○
Kühnel Ruben-Simon	High-voltage aqueous supercapacitors. 69 th Meeting of the International Society of Electrochemistry, Bologna, IT, 08-28 to 09-18 ◆
Kühnel Ruben-Simon	Towards stable 2 V class sodium-ion batteries based on aqueous electrolytes. 69 th Meeting of the International Society of Electrochemistry, Bologna, IT, 08-28 to 09-18 ●
Landmann Daniel	Design guidelines for next-generation sodium-metal-halide batteries. Empa PhD Symposium 2018, Dübendorf, Empa, 11-26 ◆
Landmann Daniel	Thermal and electrical matching of thermoelectric modules by multi physics modelling and validation by experiment. BFE Waste Heat Recovery Trend Watching Meeting, Dübendorf, Empa, 09-20 ●
Landmann Daniel	Multi physics modeling of molten salt batteries. 2 nd ZEBRA Battery Meeting, Meiringen, 10-18 to 10-19 ●
Pagani Francesco	Epitaxial Li ₄ Ti ₅ O ₁₂ thin film as model system for Li-ion conductivity. Massachusetts Institute of Technology Seminar, Boston, US, 12-03 ● ○
Pagani Francesco	Epitaxial Li ₄ Ti ₅ O ₁₂ thin film as model system for Li-ion conductivity. Materials Research Society Fall Meeting 2018, Boston, US, 11-25 to 11-30 ●
Pagani Francesco	Epitaxial thin-films as a model system for Li ₄ Ti ₅ O ₁₂ Li-ion conductivity. 1 st Swiss and Surrounding Battery Days, Baden, 05-23 to 05-25 ◆
Reber David	A high-voltage aqueous electrolyte for Sodium-ion batteries. 1 st Swiss and Surrounding Battery Days, Baden, 05-23 ● ○
Reber David	Batteries based on aqueous electrolytes for short-term stationary electricity storage. RFA NAREP & Energy Seminar, Dübendorf, Empa, 09-03 ● ○
Reber David	Breaking the wall of renewable energy storage. Falling Walls Lab Zurich, Zürich, 09-27 ●
Reber David	High-voltage aqueous batteries. Empa PhD Symposium 2018, Dübendorf, Empa, 11-26 ◆
Reber David	High-voltage aqueous batteries. EPFL Research Day, Lausanne, 12-12 ◆ ○
Reber David	A high-voltage aqueous electrolyte for sodium-ion batteries. 233 rd Meeting of the Electrochemical Society, Seattle, US, 05-13 to 05-17 ●
Reber David	Breaking the wall of renewable energy storage. Falling Walls Lab Berlin, Berlin, DE, 11-06 to 11-10 ● ○
Reber David	High-voltage aqueous electrolytes for sodium-ion batteries and supercapacitors. 1 st Swiss and Surrounding Battery Days, Baden, 05-23 to 05-25 ◆
Reber David	High-voltage aqueous electrolytes for sodium-ion batteries and supercapacitors. EPFL Winterschool Challenges & Opportunities in Energy Research, Crans-Montana, 03-05 to 03-09 ◆
Remhof Arndt	Borohydride-based electrolytes for all-solid-state batteries. Materialwissenschaftliches Kolloquium TU Darmstadt, Darmstadt, DE, 02-26 ● ○
Remhof Arndt	Borohydride-based solid-state electrolytes with liquid-like sodium and lithium conductivity at room temperature. 255 th National Meeting of the American Chemical Society, New Orleans, US, 03-17 to 03-22 ● ○
Remhof Arndt	Magnesium solid electrolytes based on coordination complexes of magnesium borohydride. 2 nd International Symposium on Magnesium Batteries, Ulm, DE, 09-27 to 09-28 ●
Remhof Arndt	1 st International Symposium on Solid-State Batteries, Empa Akademie, Dübendorf, 05-28 to 05-29 ■
Tang Yinglu	Impact of Ni content on the thermoelectric properties of Half-Heusler TiNiSn. TMS 2018 Annual Meeting & Exhibition, Phoenix, US, 03-11 to 03-15 ● ○

Vidal Laveda Josefa

Stabilizing NMC811 in full cells with high areal capacity. th nd Electricity Storage, Rapperswil, 11-06 ◆

Vidal Laveda Josefa

Stabilizing NMC811 in full cells. 1st Swiss and Surrounding Battery Days, Baden, 05-23 to 05-25 ● ○

Vogt Ulrich/

Emission studies of hydrogen combustion for cooking and heating on catalytic coated ceramic foams. 14th International Ceramics Congress, Perugia, IT, 06-04 to 06-08 ●

Vogt Ulrich

Low emissions from catalytic hydrogen combustion on highly porous Pt coated SiC foams. DGM-Fachausschussitzung Zellulare Werkstoffe, Wien, AT, 05-07 to 08-08 ● ○

Vogt Ulrich

Ultra-low NOx emission from catalytic hydrogen combustion on highly porous Pt coated SiC foams. 12th International Conference on Ceramic Materials and Components for Energy and Environmental Applications (CMCEE-12), Singapur, SG, 07-22 to 07-27 ● ○

Adam Veronique/Caballero-Guzman Alejandro/Bernd Nowack

Forms of released engineered nanomaterials: A systematic assessment in material flow analysis. SETAC Europe 2018, Rome, IT, 05-13 to 05-17 ◆

Adam Veronique/Caballero-Guzman Alejandro/Nowack Bernd

Probabilistic material flow modelling including the forms in which engineered nanomaterials are released. International Conference on the Environmental Effects of Nanoparticles and Nanomaterials, Durham, US, 09-05 to 09-07 ●

Beloin-Saint-Pierre Didier

Aspects clés pour l'évaluation de la durabilité environnementale des nanoparticules. 5e Atelier du GDRi-Nanomateriaux Multifonctionnels Contrôlés, Port Argelès, FR, 05-14 to 05-16 ● ○

Beloin-Saint-Pierre Didier

Modeling with the Life Cycle Assessment (LCA) framework. Dagstuhl-Seminar: Modelling for sustainability, Dagstuhl, Wadern, DE, 08-27 to 08-31 ●

Beloin-Saint-Pierre Didier/Hischier Roland

The importance of acquiring accurate values for energy demand: a quantitative evaluation. SETAC Europe 24th LCA Case Study Symposium, Vienna, AT, 09-24 to 09-26 ●

Beloin-Saint-Pierre Didier/Hischier Roland/Teske Sinan/Rüdisüli Martin/Bach Christian

Electricity Based Mobility – Future Impacts on the power grid and the carbon footprint of passenger vehicles in Switzerland. EMPA Peer Review 2018, Dübendorf, 10-23 ◆

Böni Heinz

Aspectos generales de la gestión de RAEE: El Caso de Suiza. Gestión integral de RAEE: Cooperación y Diseño Sistémico de Soluciones, Cuenca, EC, 07-16 to 07-20 ●

Böni Heinz

E-waste Recycling in Latin-America. Going Green CARE INNOVATION 2018, Wien, AT, 11-26 to 11-29 ●

Böni Heinz/Hischier Roland

Reuse of electrical and electronic devices: insights of an economic and environmental analysis in Switzerland. Going Green CARE INNOVATION 2018, Wien, AT, 11-26 to 11-29 ●

Desing Harald/Böni Heinz/Hischier Roland

Laboratory for Applied Circular Economy. Science to support Circular Economy, TU Vienna, AT, 09-19 ◆

Desing Harald/Böni Heinz/Hischier Roland

Environmental and Engineering Aspects of a new top-down Approach to Circular Economy. SETAC LCA symposium, Vienna, Boku, AT, 09-24 to 09-26 ●

Gasser Michael

Processing and Treatment of e-waste plastics. EWAM (E-waste Academy for Managers), Bangkok, TH, 05-07 to 05-11 ● ○

Gauch Marcel

Energie- und Mobilitätsoptionen aus Nachhaltigkeitssicht. ABB Corporate Research Workshop, Baden-Dättwil, 10-23 ● ○

Gauch Marcel

Life Cycle Assessment of Batteries. Tagung Batterien für die E-Mobilität, ETH Zürich, Audi Max, 02-01 ● ○

Gauch Marcel

MatCH – Bau. RFA Seminar Materialien für Nachhaltiges Bauen, Dübendorf, 08-24 ● ○

Gerber Andreas/Ulrich Markus

Workshop about the "post-fossil cities" project. Ressourcen Forum Schweiz, Dübendorf, 10-25 ■ ○

Gerber Andreas/Ulrich Markus

Workshop about the post-fossil cities project. Ressourcen Forum Schweiz, Dübendorf, 10-25 ■ ○

Gerber Andreas/Wäger Patrick/Ulrich Markus

Workshop of the "post-fossil cities" project. Workshop of the "post-fossil cities" project, ETH Zürich, 09-25 ■

Haarman Arthur/Francois Olivier/Tams Ingrid/Valache Michel	Economie circulaire: zoom sur le recyclage des plastiques (Panel discussion). Symposium 2018: Innovation et économie circulaire, une révolution en marche, Paris, FR, 06-05 🍷 ○
Haarman Arthur/Widmer Rolf/Hischier Roland	Environmental assessment of the recovery of scarce technology metals from end-of-life vehicles. EMPA Peer Review 2018, Dübendorf, 10-23 ♦
Haarman Arthur	E-Waste Plastic Workshop. Regional E-waste workshop for the Central Asian countries of the CIS, Almaty (via confcall), KZ, 01-31 🍷 ○
Hernandez Edgar/Claudia Som/Bernd Nowack	Machine learning and QSAR Meta-analysis of nanobiomaterials used as nanocarriers within a Safe by Design (SbD) context. Nanosafe 2018, Grenoble, FR, 11-05 to 11-09 🍷
Hilty Lorenz	Dagstuhl-Seminar: Modelling for sustainability, Dagstuhl, DE, 08-26 to 08-31 ■
Hilty Lorenz	Keynote Speech. Bits und Bäume, Berlin, DE, 11-17 to 11-18 🍷 ○
Hischier Roland/Reale Francesca/Castellani Valentina/Sala Serenella	Reducing the environmental footprint of household appliances: Insights from the LCA of efficiency measures and expected trends. CARE INNOVATION 2018, Vienna, AT, 11-26 to 11-29 🍷
Hischier Roland/Böni Heinz	Reuse of electrical and electronic devices: insights of an economic and environmental analysis in Switzerland. 24 th SETAC Europe LCA Symposium, Vienna, AT, 09-24 to 09-26 🍷
Hischier Roland/Reale Francesca/Castellani Valentina/Sala Serenella	The impact of European consumption of household appliances: insights from the LCA of efficiency measures and expected trends. 28 th SETAC Europe Annual Meeting, Roma, IT, 05-13 to 05-17 ♦
Kakkos Efstathios/Hischier Roland	Evaluation of the sustainability potentials of new construction techniques and materials – the case study of the Urban Mining and Recycling Unit (UMAR). Seminar "Abbau Anbau Aufbau" des Lehrstuhls Nachhaltiges Bauen Dirk Hebel am Karlsruher Institut für Technologie (KIT), Karlsruhe, DE, 04-24 🍷 ○
Kakkos Efstathios/Hischier Roland	Evaluation of the sustainability potentials of new construction techniques and materials – case study of the Urban Mining and Recycling Unit (UMAR). EMPA Peer Review 2018 – Sustainable built environment path, Dübendorf, 10-24 ♦
Kawecki-Wenger Delphine/Nowack Bernd	Modellierung von Plastikflüsse in die Umwelt. Risiko & Sicherheit Vereinanlass, Zurich, 10-25 🍷 ○
Kawecki-Wenger Delphine/Nowack Bernd	Modelling of the emissions of macro- and microplastics for seven different polymers. Seminar at ETHZ in the group of Stefanie Hellweg, Zurich, 04-10 🍷 ○
Kawecki-Wenger Delphine/Nowack Bernd	Modelling plastic flows into the environment. RFA NAREP + Energy Colloquium, Dübendorf, 10-01 to 🍷 ○
Kawecki-Wenger Delphine/Nowack Bernd	Environmental flows of macro- and microplastics for seven different polymers using Material Flow Analysis. Nano and microplastics in technical and freshwater systems, Ascona, 10-28 to 10-31 🍷
Kawecki-Wenger Delphine/Nowack Bernd	Modelling of the environmental release of macro- and microplastics for seven different polymers. SETAC, Rome, IT, 05-13 to 05-16 🍷
Loevik Amund/Waeger Patrick	Characterizing the Urban Mine. SusCritMat Winter School, Les Diablerets, 01-14 to 01-19 🍷 ○
Loevik Amund/Waeger Patrick	Characterizing the Urban Mine. SusCritMat Autumn School for Professionals, Delft, NL, 10-24 to 10-26 🍷 ○
Mader Clemens	Bildung für nachhaltige Entwicklung – gestern, heute, morgen. BenE München Forum 2018, München, DE, 11-19 🍷 ○
Mader Clemens	Bildung für nachhaltige Entwicklung – Globale Programme und lokale Implementierung. Seminar zur Ausbildung in Seltenen und Kritischen Materialien, Dübendorf, 02-27 🍷 ○
Mader Clemens	Burning the Myths of Artificial Intelligence. BEConference – Innovationspark Luzern, Luzern, 11-23 🍷 ○
Mader Clemens	Der Nachhaltigkeitsdiskurs in der Technologiefolgenabschätzung.. Sustainable COntsumption and COmmunication SuCo2, Lüneburg, DE, 05-08 🍷 ○

Mader Clemens
Mit Nachhaltigkeit in die Zukunft: 10 Jahre – 10 LEDs. Festveranstaltung – Emeritierung Prof. Dr. Friedrich Zimmermann, University of Graz, AT, 11-16 ● ○
Mader Clemens
Past and Future of Higher Education for Sustainable Development. Future Forward Summit 2018, Brussels, BE, 10-16 to 10-18 ● ○
Mader Clemens
Quality Criteria in Technology Assessment. Netzwerk Technologiefolgen Abschätzung, Karlsruhe, DE, 11-07 to 11-08 ●
Mader Clemens/Claudia Som
Blockchain und nachhaltige Entwicklung in der Textilbranche. Potentiale der Blockchain für die Schweizer Textilindustrie, Zürich, 11-21 ■ ○
Mader Clemens/Lorenz Hilty
LOTA – A software tool to enhance the quality of participatory research. Swiss Inter-and Transdisciplinary Conference, EPFL Lausanne, 11-15 ◆
Mader Clemens/Ruth Förster
Transformatives Lernen und der Whole Institutino Approach. Strategiesitzung der saguf, Zürich, 10-23 ● ○
Mader Clemens/Lorenz Hilty
TA als Geburtshelfer eines rationalen Nachhaltigkeitsdiskurses. TA18 – Technologiefolgen-Abschätzung Jahreskonferenz der Oesterreichischen Akademie der Wissenschaften, WIEN, AT, 06-11 to 06-18 ●
Matasci Cecilia/Gauch Marcel/Böni Heinz
MatCH Mobilität – Material- und Energieressourcen sowie Umweltauswirkungen der Mobilität Schweiz. Ressourcen Forum Schweiz 2018, Dübendorf, 10-25 ◆
Matasci Cecilia/Gauch Marcel/Böni Heinz
MatCH-Mobility – Material- and energy resources of the Swiss mobility and related environmental impacts. EMPA Peer Review 2018, Dübendorf, 10-23 ◆
Matasci Cecilia/Gauch Marcel/Böni Heinz
Material- and energy resources and related environmental impacts of Swiss mobility. RFA NAREP + Energy Colloquium, Dübendorf, 07-02 ● ○
Matasci Cecilia
Ressourcen Forum Schweiz 2018, Dübendorf, 10-25 ■
Nowack Bernd
Environmental risk assessment of engineered nano-SiO ₂ , nano iron oxides, nano-CeO ₂ , nano-Al ₂ O ₃ , and quantum dots. SETAC Europe 28 th Annual Meeting, Rom, IT, 05-13 to 05-17 ●
Nowack Bernd
Die Wege von Mikroplastik in die Umwelt und in die Gewässer. 51. Essener Tagung für Wasserwirtschaft, Essen, DE, 03-14 to 03-16 ● ○
Nowack Bernd
Modelling the environmental release of macro- and microplastics for seven different polymers. Gordon Research Conference, Environmental Sciences: Water, Holderness, US, 06-24 to 06-29 ◆
Nowack Bernd
Predicting nanomaterial flows to the environment: state of the art and new developments. NanoTox2018 – 9 th International Conference on Nanotoxicology, Neuss, DE, 09-18 to 09-21 ● ○
Restrepo Eliette
Minas sobre ruedas. IV Pódium Suiza-Alianza del Pacífico. Tecnología e Innovación, ETH - Zurich, 10-09 ● ○
Restrepo Eliette/Loevik Amund/Widmer Rolf
Predictability of scarce technical metals in automobile shredder light fraction. International Automobile Recycling Congress, Vienna, AT, 03-14 to 03-16 ●
Salieri Beatrice/Roland Hischier
Environmental Sustainability of new anode materials for Li-Ion batteries: How to interpret correctly LCA-based results of new materials? SETAC 24 th Europe LCA Symposium, Wien, AT, 09-24 to 09-26 ●
Salieri Beatrice/Rösslein Matthias/Kaiser Jean-Pierre/Hischier Roland/Nowack Bernd/Wick Peter
Relative potency approach for using in vitro information to calculate human effect factors in LCIA. SETAC Europe 28 th Annual meeting, Rome, IT, 05-13 to 05-17 ●
Schmutz Mélanie/Wick Peter/Som Claudia
Developing Safe-by-Design concept for nanomedicine and supporting the Needs of Small and Medium Enterprises. SETAC, Rome, IT, 05-14 to 05-18 ◆
Schmutz Mélanie/Wick Peter/Som Claudia
Managing the value chain of nanomedicine. Nanosafe, Grenoble, FR, 11-05 to 11-16 ●
Som Claudia/Hischier Roland/Piccinno Fabiano
How to find sustainable applications for new materials and how to overcome the relativity of LCA. 28 th SETAC Europe Annual Meeting, Roma, IT, 05-13 to 05-17 ●

Stoudmann Natasha/Nowack Bernd/Som Claudia
Prospective environmental risks assessment of nanocellulose. Nanosafe 2018, Grenoble, FR, 11-05 to 11-09 📍
Turner David/Hischier Roland
A global, regionalised LCA of copper mining and processing. SETAC Europe 24 th LCA Symposium, Vienna, AT, 09-24 to 09-26 📍
Turner David/Doka Gabor/Hischier Roland
Regionalised LCA of sulphidic tailings disposal. 2 nd Conference on Life Cycle Assessment of Waste 2018, Snekersten, DK, 06-18 to 06-22 📍
Turner David/Doka Gabor/Hischier Roland
Region-specific life cycle inventories for tailings disposal in ecoinvent v3. SETAC Europe 28 th Annual Meeting, Rome, IT, 05-14 to 05-17 📍
Wäger Patrick
Circular economy & secondary resource management: How UNFC can act as enabler. United Nations Economic Commission for Europe (UNECE): Committee on Sustainable Energy, Sustainable resource management, United Nations, Geneva, 09-26 📍 ○
Wäger Patrick
Seltene Metalle – Rohstoffe für Zukunftstechnologien. focusTerra, Sonderausstellung BodenSchätzeWerte, "Seltene Metalle für die digitale Welt", Zug, 07-05 📍 ○
Wäger Patrick
Prospecting Secondary Raw Materials in the Urban Mine and Mining Wastes (ProSUM). Resources for Future Generations (RFG) 2018, Vancouver Convention Centre, CA, 06-17 to 06-21 📍
Wäger Patrick
Seltene Metalle: Rohstoffe für Zukunftstechnologien. Seminar zur Ausbildung in seltenen und kritischen Materialien, Empa Dübendorf, 02-27 to 02-20 📍 ○
Wäger Patrick/Alessa Hool (ESM Foundation)
Seminar zur Ausbildung in Seltenen und Kritischen Materialien, Empa Dübendorf, 02-27 ■
Wäger Patrick/Gerber, Andreas/Hilty, Lorenz/Müller, Daniel (NTNU)/Ulrich Markus (UCS)
Constraint Aware Pathways to the Post-Fossil Swiss City (CAPATHITY). NRP 73 "Sustainable Economy" Kick-off Meeting, Nottwil, 01-22 📍 ○
Wäger Patrick/Haarman Arthur/Loevik Amund/Müller Sandra/Restrepo Eliette/Widmer Rolf
Scarce / critical metals recovery from electrical and electronic devices in passenger vehicles. UNECE Resource Management Week, Symposium on the availability of raw materials from secondary sources – a key aspect of circular economy, United Nations, Geneva, 04-24 📍 ○
Wäger Patrick/Loevik Amund/Restrepo Eliette/Widmer Rolf
Characterizing stocks and flows of critical metals in passenger vehicles. International Symposium "Science to Support Circular Economy", TU Vienna, AT, 09-19 📍 ○
Wäger Patrick/Widmer Rolf
Erfahrungen der Empa, Abteilung Technologie & Gesellschaft mit Lehrveranstaltungen zum Thema Kritikalität. Seminar zur Ausbildung in seltenen und kritischen Materialien, Empa Dübendorf, 02-27 📍 ○
Wenger Delphine/Nowack Bernd
Flows of plastic into the environment: A modelling approach. Seminar at Eawag, Dübendorf. 2017-12-12 📍 ○
Wenger Delphine/Nowack Bernd
Modelling the flows of micro- and macroplastics to the environment. Empa PhD Symposium, Dübendorf. 2017-11-13 📍
Widmer Rolf
knappes Lithium? WAVE, Zug, 06-18 📍 ○
Widmer Rolf
Auditing and standards to ensure quality and trust. EWAM (E-waste Academy for Managers), Bangkok, TH, 05-07 to 05-11 📍 ○
Widmer Rolf
ISO Guiding principles for Sustainable Recycling. EWAM (E-waste Academy for Managers), Bangkok, TH, 05-07 to 05-11 📍 ○
Widmer Rolf/Heinz Böni
Recycling and Recovery Targets: Can WEEE reach them? Care Innovation 2018, Vienna, AT, 11-27 to 11-29 📍
Widmer Rolf/Gasser Michael
EWAM (E-waste Academy for Managers), Bangkok, TH, 05-07 to 05-11 ■ ○
Wigger Henning/Nowack Bernd
Next steps in environmental risk assessment of engineered nanomaterials considering material-specific properties. 13 th International Conference on the Environmental Effects of Nanoparticles and Nanomaterials (ICEENN 2018), Durham, North Carolina, US, 09-05 to 09-07 📍
Wigger Henning/Nowack Bernd
Next steps in environmental risk assessment of engineered nanomaterials considering material-specific properties. nanoSafe 2018, Grenoble, FR, 11-05 to 11-09 📍

Wigger Henning/Wohlleben Wendel/Nowack Bernd

Redefining Environmental Nanomaterial Flows: Consequences of the Regulatory Definition on the Results of Exposure Models. nanosafe 2018, Grenoble, FR, 11-05 to 11-09 🍷

Functional Materials**Amberg Martin/Plichta Thomas/Leutenegger Daniel/Rupper Patrick/Hegemann Dirk**

Advanced Fibers by Plasma-Deposited Multilayers. 16th International Conference on Plasma Surface Engineering, Garmisch Partenkirchen, DE, 09-17 to 09-21 🍷

Amberg Martin/Martin Amberg/Hanselmann Barbara/Rupper Patrick/Hegemann Dirk

Plasma Deposition on Fibers by PVD and CVD Processes. 5th International Workshop – Plasma Science & Interfaces 2018, St. Gallen, 10-18 to 10-19 🍷 ○

Amberg Martin/Plichta Tomas/Leutenegger Daniel/Rupper Patrick/Hegemann Dirk

Plasma-Deposited Multilayers enabling Advanced Fibers. 5th International Workshop – Plasma Science & Interfaces 2018, St. Gallen, 10-18 to 10-19 🍷 ○

Bülbül Ezgi/Hegemann Dirk/Heuberger Manfred

Long-range interactions induced by oriented water molecules within plasma polymeric subsurfaces. 15th European Vacuum Conference (EVC-15), Geneva, 06-18 to 06-22 🍷 ○

Bülbül Ezgi

The role of confined water within plasma polymerized vertical gradient films in protein adsorption. 16th International Conference on Plasma Surface Engineering (PSE), Garmisch-Partenkirchen, DE, 09-17 to 09-21 🍷

Gaan Sabyasachi

An Overview of New Flame Retardant Chemistries and Their Applications. 5th International Symposium on Flame-Retardant Materials & Technologies, Hangzhou, CN, 06-14 to 06-16 🍷 ○

Gaan Sabyasachi

New flame retardants for thermoplastic fibres: challenges and opportunities. Fire Resistance in Plastics 2018. Conference Information, Cologne, DE, 12-10 to 12-12 🍷 ○

Gaan Sabyasachi

New phosphorus based flame retardants. ICPC 2018, Budapest, HU, 07-08 to 07-13 🍷

Gaan Sabyasachi/Pietro Simonetti/Khalifah Salmeia/Rashid Nazir

Flame Retardation of Polymer via Reactive Extrusion. 29th Annual Conference on Recent Advances in Flame Retardancy of Polymeric Materials, Stamford CT, USA, US, 05-20 to 10-24 🍷 ○

Gaiser Sandra

Influence of Gas Flow and Pressure on Plasma Deposition Mechanisms. 5th International Workshop on Plasma Science & Interfaces, St. Gallen, 10-18 to 10-19 🍷 ○

Gaiser Sandra

Numerical Simulation of the Gas Flow in a PECVD Reactor. International Conference on Plasma Surface Engineering (PSE) 2018, Garmisch-Partenkirchen, DE, 09-17 to 09-21 🍷

Hegemann Dirk

Highly stabilized amine-functional plasma polymer films thanks to a well-defined vertical gradient nano-architecture. 2018 E-MRS Spring Meeting – Symposium S, Strasbourg, FR, 06-18 to 06-22 🍷

Hegemann Dirk

Long-range Interactions Forces Exerted by Hydrophobic / Hydrophilic Hybrid Thin Films. 2018 E-MRS Spring Meeting – Symposium L, Strasbourg, FR, 06-18 to 06-22 🍷

Hegemann Dirk

On the role of hydration in functional plasma polymer films comprising gradient structures. Conference On Cold Plasma Sources and Applications (COPSA), Ypres, BE, 11-19 to 11-23 🍷 ○

Hegemann Dirk

Plasma functionalization of textiles and fibers based on reel-to-reel processing. Future Functional Fibers and Fabrics, Guangzhou, CN, 11-16 to 11-17 🍷 ○

Hegemann Dirk

Plasma Polymerization (of Hydrocarbons) – A Comparison of Low- and Atmospheric Pressure Processes Based on Energy Uptake per Molecule. 16th International Conference on Plasma Surface Engineering (PSE), Garmisch-Partenkirchen, DE, 09-17 to 09-21 🍷 ○

Hegemann Dirk/Bülbül Ezgi/Heuberger Manfred

Protein Adsorption: The Role of Water Penetrating Plasma Polymer Films. Gordon Research Conference Plasma Processing Science, Smithfield / RI, US, 08-05 to 08-10 🍷

Hegemann Dirk/Rudolf von Rohr Philipp (ETH Zurich); de Haan Hugo (Vision Dynamics)

5th International Workshop Plasma Science & Interfaces, St.Gallen, 10-18 to 10-19 🍷

Heuberger Manfred

InnovationDay 2018, Dübendorf, 08-23 🍷 ○

Heuberger Manfred/Hegemann Dirk/Bülbül Ezgi

How subsurface nano-gradients can affect protein-surface interaction.. 2018 MRS Spring Meeting, Phoenix, AZ, US, 04-02 to 04-06 🍷

Heuberger Manfred	The fine structure of electrical double layers – revealed by the extended Surface Forces Apparatus. Seminar – Water Reuse and Desalination Center, Thuwal, SA, 09-08 to 09-12 ● ○
Hufenus Rudolf	Advanced fibers – innovation by combination of materials. Seminar, Taiwan Textile Research Institute, TW, 05-25 ● ○
Hufenus Rudolf	Advanced fibers – innovation by combination of materials. Seminar, Guangdong Xinhui Meida Nylon Co., Jiangmen, CN, 05-31 ● ○
Hufenus Rudolf	Advanced fibers – innovation by combination of materials. Seminar, Guangdong Xinhui Meida Nylon Co., Jiangmen, CN, 06-01 ● ○
Hufenus Rudolf	Melt-spun P3HB fibers. Seminar, Kaneka, Tokyo, JP, 06-08 ● ○
Hufenus Rudolf	Multifunctional liquid-core fibers. Seminar, South China University of Technology, Guangzhou, CN, 05-30 ● ○
Hufenus Rudolf	Flexible polymer optical fibers produced by bicomponent melt-spinning. Tailored Optical Fibers, 11. Jenaer Lasertagung, Konferenzzentrum der Ernst-Abbe-Hochschule Jena, DE, 11-22 to 11-23 ● ○
Hufenus Rudolf	Multifunctional Liquid-core Fibers. 34 th International Conference of the Polymer Processing Society (PPS-34), Taipei International Convention Center, TW, 05-21 to 05-25 ● ○
Hufenus Rudolf	Multifunctional Liquid-core Fibers. The Fiber Society's Spring Conference, Tower Hall Funabori, Tokyo, JP, 06-12 to 06-14 ● ○
Hufenus Rudolf	Novel bicomponent filaments for technical applications. International Seminar Future Functional Fibers & Fabrics, Yifu International Conference Hall, Guangzhou, CN, 11-16 to 11-17 ● ○
Hufenus Rudolf	Novel bicomponent filaments for technical applications. 6 th International Conference on Technical Textiles and Nonwovens, IIT Delhi, IN, 12-06 to 12-08 ● ○
Hufenus Rudolf	Session "Fiber and Fiber Processing." 34 th International Conference of the Polymer Processing Society (PPS-34), Taipei International Convention Center, TW, 05-21 to 05-25 ▲ ○
Hufenus Rudolf	Session "Smart Polymers, Fibers and Textiles." The Fiber Society's Spring Conference, Tower Hall Funabori, Tokyo, JP, 06-12 to 06-14 ▲ ○
Nazir Rashid/Sabyasachi Gaan	Solvent and Catalyst free Microwave-Assisted Addition of P(O)-H Bonds to Al Kenes.. 22 nd International Conference on Phosphorus Chemistry, Budapest, HU, 07-08 to 07-13 ◆
Rupper Patrick/Vandenbossche Marianne/Bernard Laetitia/Hegemann Dirk/Heuberger Manfred/	Reduced aging phenomena in graded plasma polymer films. 34 th European Conference on Surface Science, Aarhus, DK, 08-26 to 08-31 ◆
Rupper Patrick	Reduced aging phenomena in graded plasma polymer films. Plasma Science & Interfaces: 5 th International Workshop, Empa, St.Gallen, 10-18 to 10-19 ● ○
Salmeia Khalifah/Sabyasachi Gaan	Synthesis of Bridged Trazine Phosphonates and their Application. 22 nd International Conference on Phosphorus Chemistry (ICPC), Budapest, HU, 07-08 to 07-13 ●
Yan Yurong/Hufenus Rudolf	Measuring the Interfacial Tension of Polymer Melts: A Modified Fiber Retraction Method. The Fiber Society's Spring Conference, Tower Hall Funabori, Tokyo, JP, 06-12 to 06-14 ● ○
Behrh Gaganpreet/Matthias Koebel	Strontium Aluminate based aerogel phosphors for the enhanced afterglow properties. International Aerogel Seminar, Hamburg, DE, 09-23 to 09-26 ◆
Brunner Samuel	VIPs aging and the durability question. 2018 VIP Training and Application Meeting, Taicang, CN, 07-16 to 07-17 ● ○
Brunner Samuel	Weathering of Materials – From the example airplane coating at harsh conditions towards milder examples. Materials Plus 2018-International Forum on Materials for harsh environments, Nanjing, CN, 10-27 to 10-28 ● ○
Civioc Romain/Sandra Galmarini/Marco Lattuada/Matthias Koebel	Silica-Organic composite aerogels. International Aerogel Seminar, Hamburg, DE, 09-23 to 09-26 ◆

Ganobjak Michal	Aerogel based Solutions in renovation of the historical buildings and monuments. 2018 VIP Training and Application Meeting, Taicang, CN, 07-16 to 07-17 🍷 ○
Huber Lukas	Monolithic Carbon Xerogel Sorbents. Advanced Sorption Materials, Dübendorf, 05-08 🍷 ○
Huber Lukas	Water sorption behavior of physically activated monolithic nitrogen doped carbon for adsorption cooling. 34. SAOG Meeting, Fribourg, 02-01 to 11-01 ♦
Huber Lukas/Sandra Galmarini/Matthias Koebel	Organisation of Workshop, Empa Academy. Advanced Sorption Materials, Dübendorf, 05-08 ■
Koebel Matthias	Aerogel superinsulation – Looking back on a decade of technology, process, product and market development. TechConnect World, 2018, Anaheim, US, 05-13 to 05-16 🍷 ○
Malfait Wim/Shanyu Zhao/Matthias Koebel/Olivier Emery	Merging flexibility with superinsulation: Machinable nanofibrous pullulan-silica aerogel composites. International Aerogel Seminar, Hamburg, DE, 09-23 to 09-26 🍷
Malfait Wim/Shanyu Zhao/Matthias Koebel	New analytical tools to study aerogel surface chemistry and dynamics – Quantitative solid-state NMR and quasi-elastic neutron scattering. International Aerogel Seminar, Hamburg, DE, 09-23 to 09-26 ♦
Stojanovic Ana/Wim Malfait/Shanyu Zhao/Matthias Koebel/Emanuele Angelika	Three routes for superinsulating, silica aerogel powder production: material quality and economic considerations. International Aerogel Seminar, Hamburg, DE, 09-23 to 09-26 🍷
Wernery Jannis	Aerogel Insulation Materials for the Building Envelope. Advanced Building Skins 2018, Bern, 10-01 to 10-02 ▲
Wernery Jannis/Avner Ben-Ishai/Bruno Binder/Samuel Brunner	Aerobrick – Ein Hochleistungsdämmziegel mit Aerogel-Füllung. Statusseminar 2018, Zürich, 09-06 to 09-07 🍷
Wernery Jannis/Avner Ben-Ishai/Bruno Binder/Samuel Brunner	Aerobrick: an aerogel-filled insulating brick. International Aerogel Seminar, Hamburg, DE, 09-23 to 09-26 ♦
Wernery Jannis/Avner Ben-Ishai/Bruno Binder/Samuel Brunner	Aerobrick: an aerogel-filled insulating brick. Advanced Building Skins 2018, Bern, 10-01 to 10-02 🍷
Zhao Shanyu/Wim Malfait/Matthias Koebel	Aerogel-based light-driven gas pump and VOC removal. International Aerogel Seminar, Hamburg, DE, 09-23 to 09-26 🍷
Adobes Vidal Maria/Frey Marion/Keplinger Tobias	Challenges and potential of nanomechanical characterization of plant cell walls by Atomic Force Microscopy. Wood Nanotechnology Conference, Ascona, 09-02 to 09-05 🍷
Antonini Carlo/Geiger Thomas	High Porosity Cellulose-Based Foams by Ice-Templating. MRS Fall Meeting, Boston, US, 11-25 to 11-30 🍷
Arcari Mario/Nyström Gustav/Mezzenga Raffaele	Confinement-induced liquid crystalline transitions in amyloid fibril cholesteric tactoids. SCS Fall Meeting 2018, Lausanne, 09-07 🍷
Burgert Ingo	Bio-inspired wood and cellulose materials. Symposium: Perspectives in Renewables, BOKU Vienna, AT, 06-04 to 06-05 🍷 ○
Burgert Ingo	Bio-inspired wood materials science for new technological systems. Fraunhofer Gesellschaft, FUTURAS IN RES 2018, Axica, Berlin, DE, 06-28 to 06-29 🍷 ○
Burgert Ingo	Bio-inspired wood materials. WWSC 10-year workshop New materials from trees, Aronsborg, SE, 06-18 to 06-20 🍷 ○
Burgert Ingo	Bio-inspired Wood Nanotechnology. Swiss NanoConvention 2018 – ETH Zürich, Zürich, 06-06 to 06-07 🍷 ○
Cabane Etienne	Functional lignocellulosic materials for water purification applications. 255 th ACS National Meeting & Exposition, New Orleans, US, 03-18 to 03-22 🍷 ○
Cabane Etienne	Functional lignocellulosic materials. Symposium “Perspectives in Renewables”, Tulln, AT, 06-04 to 06-05 🍷 ○
De Freitas Siqueira Gilberto	3D printing of cellulose nanocrystals suspensions. 8 th Glyco@Event – GlycoAlpes, Grenoble, FR, 06-22 🍷 ○
De Freitas Siqueira Gilberto	3D printing of nanocellulose materials. GlycoAlpes: Upscaling glycosciences: from the test tube to the eco-innovating industry, Grenoble, FR, 11-09 🍷 ○

<p>De Freitas Siqueira Gilberto 3D printing functional nanocellulose hydrogels. 255th ACS National Meeting & Exposition, New Orleans, US, 03-18 to 03-22 🍷</p>
<p>De Freitas Siqueira Gilberto Nanocelluloses for composites applications. INCOBRA Workshop NANO-NOCMAT, Pirassununga - SP, BR, 09-10 to 09-13 🍷 ○</p>
<p>De Freitas Siqueira Gilberto Shape-memory 3D printable hydrogels with anti-microbial properties. 2018 International Conference on Nanotechnology for Renewable Materials (TAPPI), Madison, US, 06-11 to 06-14 🍷</p>
<p>Frey Marion/Biffi G./Zirkelbach M./Tu K./Keplinger T./Burgert I. Mechanical and Functional Gradients in Shaped Cellulose Materials. MAP graduate symposium, Zürich, 06-26 🍷</p>
<p>Frey Marion/Widner D./Segmehl J./Casdorff K./Keplinger T./Burgert I. Delignified and Densified Cellulose Bulk Materials. Paper and Biorefinery 2018, Graz, AT, 05-16 to 05-17 🍷 ○</p>
<p>Frey Marion/Widner D./Segmehl J./Casdorff K./Keplinger T./Burgert I. Densified cellulose scaffolds for a new class of composite materials. Bio-inspired Materials 2018, Potsdam, DE, 03-19 to 03-22 🍷</p>
<p>Frey Marion/Biffi G./Zirkelbach M./Adobes Vidal M./Tu K./Keplinger T./Burgert I. Densified Functional Cellulose Materials. Wood Nanotechnology Conference 2018, Ascona, 09-02 to 09-05 🍷</p>
<p>Frey Marion/Keplinger T./Burgert I. Verbesserung der Holzeigenschaften durch chemische Behandlung. Forum Holz – Internationales Branchenseminar für Frauen, Meran, IT, 06-28 to 06-29 🍷 ○</p>
<p>Geiger Thomas Nanocellulose -Ein vielseitiger Rohstoff, Beispiele aus der Forschung und der industriellen Anwendung. 3. Kooperationsforum, Holz als neuer Werkstoff, Cluster-Initiative Forst und Holz in Bayern GmbH, Regensburg, DE, 11-22 🍷 ○</p>
<p>Geiger Thomas/Antonini Carlo/Nylén Otto High porosity cellulose-based foams by ice-templating. 255th ACS National Meeting, New Orleans, US, 03-18 to 03-22 🍷</p>
<p>Geiger Thomas/Josset Sébastien/Hansen Lynn/Antonini Carlo High porosity cellulose-based foams by ice-templating. Bio-Based Polymers and Composites (BiCoPo) 2018, 4th International Conference, Balatonfüred, HU, 09-02 to 09-06 🍷</p>
<p>Goldhahn Christian/Burgert Ingo/Chanana Munish Catalytically Active Cellulose Fibers by Easy and Versatile Enzyme Immobilization. MAP graduate symposium, Zürich, 06-26 🍷</p>
<p>Goldhahn Christian/Janser M./Burgert Ingo/Chanana Munish Bio-modification of Wood for an Advanced Application in Water Treatment. Bio-inspired Materials 2018, Potsdam, DE, 03-19 to 03-22 🍷</p>
<p>Goldhahn Christian/Burgert Ingo/Chanana Munish Easy and Versatile Enzyme Immobilization on Cellulose Fibers. 7th EuCheMS Chemistry Congress, Liverpool, GB, 08-26 to 08-30 🍷</p>
<p>Grönquist Philippe/Frey Marion/Thybring Emil/Burgert Ingo Measuring hydroxyl accessibility of delignified wood by hydrogen-deuterium exchange. 1st European Symposium on Sorption Science, Vienna, AT, 09-05 to 09-07 🍷 ○</p>
<p>Grönquist Philippe/Wittel, F.K./Rüggeberg M. Mechanical Analysis of Wooden Bilayer Structures and Novel Application Possibilities in Timber Industry. ASCE Engineering Mechanics. Institute Conference 2018, Boston, US, 05-29 to 06-01 🍷</p>
<p>Guo Huizhang/Burgert Ingo Functions dictated by the surface structure of wood. Wood Nanotechnology Conference 2018, Locarno, 09-02 to 09-05 🍷</p>
<p>Guo Huizhang Non-biocidal Preservation of Wood against UV and Fungi. Wood Science and Technology 12th Colloquium, Freiburg, DE, 09-13 to 09-14 🍷</p>
<p>Hausmann Michael Direct Ink Writing of strong cellulose reinforced composites. Topical Day Empa, Dübendorf, 01-18 🍷</p>
<p>Hausmann Michael 3D printing of cellulose reinforced composites with versatile properties. UniFreiburg/ETH/Boku, Freiburg im Breisgau, DE, 09-13 to 09-14 🍷</p>
<p>Hausmann Michael 3D printing of cellulose reinforced composites with versatile properties. MRS Fall Meeting, Boston, US, 11-25 to 11-30 🍷</p>
<p>Hausmann Michael Rheology and application of cellulose nanocrystal inks for direct ink writing. 255th ACS National Meeting, New Orleans, US, 03-18 to 03-22 🍷</p>

Keplinger Tobias/Frey Marion/Burgert Ingo
Versatile Strategies for the development of wood-based functional materials. SPIE-Bioinspiration, Biomimetics, and Bioreplication, Denver, US, 03-04 to 03-08 🍄 ○
Kohler Kevin/Soppa Karolina/Grüneberger Franziska/Geiger Thomas
Nanocellulose – Ein möglicher Zuschlagstoff für die Methylcellulose zur Herabsetzung der Viskosität und Klebkraftsteigerung bei der Lindenh Holzverklebung. Konsolidieren & Kommunizieren, Internationale Tagung der HAWK Hochschule Hildesheim/Holzminden/Göttingen, Hildesheim, DE, 01-25 to 01-27 ♦
Künniger Tina
Cellulosefibrillen in Beschichtungen – Eine nachhaltige Alternative? Winterthurer Oberflächentag, Winterthur, 06-07 🍄 ○
Künniger Tina/Huch Anja/Arnold Martin
Cellulose nanofibrils in wood coatings – improved hail impact resistance? PRA's 11th International Woodcoatings Congress, Amsterdam, NL, 10-23 to 10-24 🍄
Lämmlein Sarah/Mannes D./Schwarze Francis/Burgert Ingo
The violin and its varnish: mystery or truth? Empa PhD Symposium, Dübendorf, 11-26 🍄
Lämmlein Sarah/Schwarze Francis/Burgert Ingo/Mannes D.
Influence of varnish materials on the moisture sorption properties of wood studied by neutron imaging. UniFrei./ETH/Boku-, Freiburg, DE, 09-13 to 09-14 🍄
Lämmlein Sarah/Schwarze Francis/Burgert Ingo/Mannes D.
Influence of varnish materials on the spatial and time-dependent moisture sorption dynamics of wood used for musical instruments studied by neutron imaging. 11th World Conference on Neutron Radiography, Sydney, AU, 09-02 to 09-07 🍄
Morris Hugh
Development of an industrial process for spalted wood in high value furniture applications. State of the World's Fungi Symposium, London, GB, 09-13 to 09-14 ♦ ○
Nyström Gustav/Mario Arcari/Kathleen Smith/Ivan Usov/Raffaele Mezzenga
Confinement Driven Organization of CNF and CNC. 2018 International Conference on Nanotechnology for Renewable Materials (TAPPI), Madison, US, 06-11 to 06-14 🍄
Olaniran Samuel Oluyinka/Cabane Etienne/Rüggeberg Markus
Mechanical Properties of Acetylated Rubberwood (Hevea brasiliensis) subsequent to accelerated weathering. 14 th Annual Meeting of the Northern European Network for Wood Science and Engineering, Tallinn, EE, 10-02 to 10-03 🍄
Olaniran Samuel Oluyinka/Cabane Etienne/Rüggeberg Markus
Preliminary studies on the effect of acetylation and subsequent weathering on tensile strength and stiffness of Rubber wood (Hevea brasiliensis). 9 th European Conference on Wood Modification 2018, Arnhem, NL, 09-17 to 09-18 ♦
Pasqualini Alessia
Biological control of internal decay in utility poles. State of the World's Fungi Symposium, London, GB, 09-13 to 09-14 ♦ ○
Rüggeberg Markus/Wittel F.K./Grönquist P./Wick A.
Smart wood actuators for climate adaptive architecture. "ASCE Engineering Mechanics Institute Conference 2018", Boston, US, 05-29 to 06-01 🍄
Rüggeberg Markus/Wittel F.K./Grönquist P./Wick A.
Smart wooden actuators. 9 th Plant Biomechanics Conference, Montreal, CA, 08-09 to 08-14 🍄
Schubert Mark
Application of deep neural networks in wood industry. Topical Day Empa – Digital Transformation, Dübendorf, 03-20 ■
Schubert Mark
Deep Learning for an efficient use of wood-based materials. Symposium – Perspectives in Renewables, Wien, AT, 06-04 to 06-05 🍄 ○
Schubert Mark/Salentinig Stefan
Softwood Lignin Self-Assembly for Nanomaterial Design. Bio-Based Polymers and Composites (BiCoPo) 2018, 4 th International Conference, Balatonfüred, HU, 09-02 to 09-06 ♦
Schwarze Francis
Pilzgeige lässt Stradivari links liegen. 15. Internationales Branchenforum für Frauen, Meran, IT, 06-29 🍄 ○
Soppa Karolina/Hoess Anita/Läuchli Matthias/Geiger Thomas/Scherrer Nadim/Zumbühl Stefan
Cellulosebeads save "The Circling of the Planets"? Conference on Modern Oil Paints (ConferenceMOP), Amsterdam, NL, 05-23 to 05-25 ♦
Soutrenon Mathieu/Billato Gabriel/Bircher Fritz/Geiger Thomas
3D Printing of Wood—Inkjet Printing of a Lignin based Ink on Cellulose. Printing for Fabrication 2018, 34 th International Conference on Digital Printing Technologies (NIP), Dresden, DE, 09-23 to 09-27 🍄
Tu Kunkun/Wang Yaru/Keplinger Tobias/Burgert Ingo
Formation of MOFs within Porous Wood Supports for CO ₂ Capture. Wood Nanotechnology Conference, Ascona, 09-02 to 09-05 🍄

Vidiella del Blanco Marta/Cabane Etienne

Wood Membranes for Oil/Water Separation. Materials and Processes (MaP) Graduate Symposium, Zürich, 06-26 🍄

Vidiella del Blanco Marta/Cabane Etienne

SI-ARGET-ATRP Grafting of Block Copolymers with Amphiphilic Properties on Lignocellulosic Materials. Polymer Reaction Engineering X, Punta Cana, DO, 05-20 to 05-25 🍄

Vidiella del Blanco Marta/Cabane Etienne

Underwater Superoleophobic Wood Cross Sections. Superhydrophilicity and Wetting Symposium, Aalto, FI, 05-16 to 05-18 🍄

Vitas Selin/Cabane Etienne

Chemical Modification of Wood Cross-Sections for Water Purification. Wood Nanotechnology Conference, Ascona, 09-02 to 09-05 🍄

Vitas Selin/Cabane Etienne

Functional lignocellulosic materials for membrane technology. 3rd Green & Sustainable Chemistry Conference, Berlin, DE, 05-13 to 05-15 🍄

Wagberg Lars/Hamed Max/Marais Andrew/Nyström Gustav/Francon Hugo/Granberg Hjalmar/Erlandsson Johan

The use of the layer-by-layer technology and low density networks of cellulose nanofibrils for preparing new materials for energy storage. 255th ACS National Meeting & Exposition, New Orleans, US, 03-18 to 03-22 🍄

Wang Yaru/Cabane Etienne

Liquid-like SiO₂-g-PDMS coatings on wood surfaces with improved underwater durability, anti-fouling, anti-smudge and self-healing properties. E-MRS Spring Meeting, Strasbourg, FR, 06-18 to 06-22 🍄

Wang Yaru/Cabane Etienne

Tuning the wettability of wood surfaces using nanotech approaches. Wood Nanotechnology Conference, Ascona, 09-02 to 09-05 🍄

Wang Yaru/Cabane Etienne

Wood surfaces protection based on silica and covalently attached liquid-like PDMS chains for improved underwater durability, anti-fouling, anti-smudge and self-healing properties. Superhydrophilicity and Wetting Symposium, Aalto, FI, 05-16 to 05-18 🍄

Griffa Michele/Yang Fei/Prade Friedrich/Kaufmann Rolf/Herzen Julia/Pfeiffer Franz/Lura Pietro

X-ray dark-field contrast imaging of water transport during hydration and drying of early-age cement-based materials. "Physics of drying" conference, Marne la Vallée, FR, 11-05 to 11-08 🍄

Hu Zhangli

Plastic shrinkage cracking in concrete: from mechanisms to mitigation strategies. NANOCEM Consortium Spring meeting, Empa Dübendorf, 04-25 🍄

Leemann Andreas

Eigenschaften und Anwendungsbereiche von Recyclingbeton. Materialien für Nachhaltiges Bauen, Empa Dübendorf, 08-24 🍄

Leemann Andreas

Simultaneous iron sulphide oxidation and alkali silica reaction in a Swiss dam. Impact of sulphide minerals (pyrrhotite) in concrete aggregate on concrete behaviour, Oslo, NO, 11-15 to 11-16 🍄○

Leemann Andreas/Widmer Heiner/Hunkeler Fritz

Assessing the CO₂-binding of concrete during its service life. Synercrete 2018, Funchal, PT, 10-24 to 10-26 🍄

Lothenbach Barbara

Calcium silicate hydrates with aluminium. 2nd WORKSHOP Calcium-Silicate Hydrates Containing Aluminium: C-A-S-H II, Empa Dübendorf, 04-23 🍄

Lothenbach Barbara

2nd WORKSHOP Calcium-Silicate Hydrates Containing Aluminium: C-A-S-H II, Empa Dübendorf, 04-23 to 04-24 🍄

Lothenbach Barbara/Bernard Ellina/L'Hôpital Emilie

Calcium silicate hydrates and magnesium silicate hydrates. 20. Internationale Baustofftagung (ibaasil), Weimar, DE, 09-12 to 09-14 🍄○

Lothenbach Barbara/Winnefeld Frank

Thermodynamic modelling: a tool to understand the chemistry of hydrated cements.. RILEM Week 2018, Delft, NL, 08-26 to 08-28 🍄○

Lura Pietro

Volume Changes of Concrete at Very Early Ages and Implications to 3D Concrete Printing. First International Conference on 3D Construction Printing, Hawthorn, Swinburne University of Technology, AU, 11-25 to 11-28 🍄○

Lura Pietro/Loser Roman/Justs Janis

Practical considerations on the application of the recent SIA 2052 guidelines on testing of Ultra-high-performance fiber-reinforced concrete. FRC2018: Fibre Reinforced Concrete: from Design to Structural Applications. Joint ACI-fib-RILEM International Workshop, Desenzano del Garda, IT, 06-28 to 06-29 🍄

Lura Pietro/Sadegh Ghourchian/Wyrzykowski Mateusz

Plastic shrinkage of fresh cementitious materials: from mechanisms to mitigation strategies. "Physics of drying" conference, Marne la Vallée, FR, 11-05 to 11-08 🍄○

<p>Lura Pietro/Terrasi Giovanni P./Wyrzykowski Mateusz/Justs Janis/Toropovs Nikolajs/Lämmlein Tobias D. Innovative Solutions for Buildings and Infrastructure based on High-Performance and Ultra-High-Performance Concrete increased Volume stability, Better Fire Resis.. 25th Australasian Conference on Mechanics of Structures and Materials (ACMSM25), Brisbane, AU, 12-04 to 12-07 🍷 ○</p>
<p>Lura Pietro/Wyrzykowski Mateusz/Yang Fei/Prade Friedrich/Griffa Michele/Kaufmann Rolf/Pfeiffer Franz 3D imaging of moisture distribution and transport in early-age cementitious materials. Advances in Durability and New Materials for Construction, Barcelona, ES, 03-20 🍷 ○</p>
<p>Winnefeld Frank Further insights in the carbonation resistance of calcium sulfoaluminate cement mortars. International Workshop on Calcium sulfoaluminate cements, Murten, 05-30 to 06-06 🍷</p>
<p>Winnefeld Frank/Empa, Lothenbach Barbara/University of Basilicata, Potenza, IT International Workshop on Calcium sulfoaluminate cements, Murten, 06-04 to 06-06 ■ ○</p>
<p>Winnefeld Frank/Hargis Craig W./Lothenbach Barbara Recent advances in research on calcium sulfoaluminate cements. 14th International Conference on Recent Advances in Concrete Technology and Sustainability, Beijing, CN, 10-30 to 11-02 🍷 ○</p>
<p>Winnefeld Frank/Hargis Craig W./Lothenbach Barbara/Steiner Sarah/Kaufmann Josef/Borgschulte Andreas/Marchi Maurizio I. Allevi Stefano/Lothenbach Barbara Carbonation of mortars based on calcium sulfoaluminate cement. 20. Internationale Baustofftagung ibausil, Weimar, DE, 09-12 to 09-14 🍷 ○</p>
<p>Winnefeld Frank/Provis John L. Outcomes of the round robin tests of RILEM TC 247-DTA on the durability of alkali-activated concrete. ICRRR2018 – Concrete Repair, Rehabilitation and Retrofitting, Cape Town, ZA, 11-19 to 11-21 🍷 ○</p>
<p>Wyrzykowski Mateusz Chair of the Session on Transport. SLD4 – the 4th International Conference on Service Life Design for Infrastructures, Delft, NL, 08-26 to 08-29 ▲</p>
<p>Wyrzykowski Mateusz Synercrete 18 – International Conference on Interdisciplinary Approaches for Cement-based Materials and Structural Concrete., Funchal, Madeira, PT, 10-24 to 10-26 ■</p>
<p>Wyrzykowski Mateusz/Pietro Lura/Karen Scrivener Basic Creep of Concrete at Early-Ages: Fundamental Mechanisms Assessed in Equivalent Systems with Arrested Hydration. Gordon Research Conference: Green and Low Carbon Cementitious Materials for Sustainability, The Hong Kong University of Science and Technology, CN, 08-05 to 08-10 🍷 ○</p>
<p>Blugan Gurdial Pure shear strength of aerospace adhesives at cryogenic and elevated temperatures. IWK-Konferenz (RIBF), Rapperswil, 06-27 🍷</p>
<p>Braun Artur A Combined In Situ Electronic Structure and Proton Transport Study with (T,p1,p2) Parameterized X-Ray Spectroscopy and Neutron Scattering. MRS Spring Meeting, Phoenix, Arizona, US, 04-04 🍷</p>
<p>Braun Artur A PEC Reactor Based on Low Cost Abundant Materials.. MRS Spring Meeting, Phoenix, Arizona, US, 04-04 🍷</p>
<p>Braun Artur In Situ Determination of Electronic Structure and Transport Properties of the Interface of Biofilms and Light Harvesting Proteins on Metal Oxide Semiconductor Photoelectrodes Under Electrophysiological. MRS Spring Meeting, Phoenix, Arizona, US, 04-04 ◆</p>
<p>Braun Artur Printing Without a Printer—Functional Self-Organized Microstructures by Controlled Reaction-Diffusion-Precipitation Wet-Stamping Method Size of "Printed" Particles.. MRS Spring Meeting, Phoenix, Arizona, US, 04-04 🍷</p>
<p>Braun Artur "Thou Shalt Not Make Unto Thee Any Graven Image" Some Remarks on X-ray Scattering and Materials Science. 14th International Conference on X-ray Microscopy (XRM2018), Saskatoon, Saskatchewan, CA, 08-19 to 08-24 🍷 ○</p>
<p>Braun Artur Anomalous Small Angle X-ray Scattering on Ceramic Fuel Cell Assemblies, and operando on a Lithium Battery Cell. Molecular Foundry Users Meeting 2018, Berkeley CA, US, 08-15 to 08-16 🍷 ○</p>
<p>Braun Artur Charge Transfer between the Thylakoid Membrane and Metal Electrodes and metal Oxide Electrodes. MRS Spring Meeting 2018, Phoenix, AZ, US, 04-01 to 04-08 ■</p>
<p>Braun Artur In situ determination of electronic structure and transport properties of the in-terface of biofilms and light harvesting proteins on metal oxide semiconductor photoelectrodes under electrophysiological. European Society for Photobiology. 2018 Photobiology School, Brixen/Bressanone, IT, 06-10 to 06-16 ◆</p>

Braun Artur In Situ Operando Resonant Valence Band Photoemission Study on Surfaces and Buffer Layer Interfaces in Water Splitting Photoelectrodes. MRS Spring Meeting 2018, Phoenix, AZ, US, 04-01 to 04-08 ■
Braun Artur The Discovery of The Proton Polaron. QENS WINS 2018, Hongkong, HK, 07-15 to 07-20 ●○
Braun Artur/Chen Qianli Influence of Compressive and Tensile Strain on the Proton-Polaron Driven Proton Transport in Ceramic Electrolyte Membranes. MRS Spring Meeting, Phoenix, Arizona, US, 04-04 ◆
Braun Artur/Rozhkova Elena/Gaillard Nicolas/Ariga Katsuhiko/Yoon Sung/ PACIFICHEM 2020, Honolulu, Hawaii, US, 2020-12-15 to 2020-12-20 ▲○
Clemens Frank Environmentally benign debinding procedures for thermoplastic based ceramic processing route. CIMTEC 2018, Perugia, IT, 06-04 to 06-07 ●○
Clemens Frank Thermoplastic polymers for fused deposition modelling – Fused filament fabrication of ceramics. DKG-Jahrestagung, Munich, DE, 04-09 to 04-13 ●
Clemens Frank/A. Michalek/T. Sebastian Synthesis of BaTiO ₃ nano-fibres and their effect on properties of BaTiO ₃ macro-fibres. CIEC16 Conferences, dedicated to Prof. Paolo Nanni, Turin, IT, 09-09 to 09-12 ◆
Clemens Frank/Industrial Partner: Bosch Highly pure Al ₂ O ₃ extrudes ceramic elements to verify the quality of sintering furnaces in the manufacturing process of sensor elements. DKG-Jahrestagung, Munich, DE, 04-09 to 04-13 ●
Conti Laura Stereolithographie. DKG-Jahrestagung, Munich, DE, 04-09 to 04-13 ◆
Gorjan Lovro/Reiff, L./Liersch, A./Clemens, F. Ethylene Vinyl Acetate as a Binder for Fused Filament Fabrication of Ceramic. CIMTEC 2018, Perugia, IT, 06-04 to 06-07 ●
Graule Thomas Additive Manufacturing of Ceramics – Status and future trends. Nordic Ceramics Conf., Kopenhagen, DK, 12-10 to 12-13 ●○
Graule Thomas Adsorption of viruses on porous ceramics structures and nanofibres. DFG-Nachwuchsakademie, Saarbrücken, DE, 11-13 to 11-17 ●○
Graule Thomas Status of Ceramics Research within Switzerland. DKG-Jahrestagung, Munich, DE, 04-09 to 04-13 ▲○
Graule Thomas/M. Schabikowski/B. Michen/G.P. Szekeres/Z. Nemeth, K. Schrantz; K. Nemeth; J. Traber; W. Pronk; K. Hernadi Adsorption of viruses on porous ceramics structures and nanofibers. CMCEE, Singapur, SG, 07-23 to 07-26 ●○
Graule Thomas/M. Schabikowski/B. Michen/G.P. Szekeres/Z. Nemeth/K. Schrantz/K. Nemeth/J. Traber/W. Pronk/K. Hernadi Interface modification for the adsorption of viruses on porous ceramics structures and nanofibers. ICCCI, Kurashiki, JP, 07-09 to 07-12 ●○
Graule Thomas/P. Ozog/L. Conti From micro to macro: Perspective of LCM-based Stereolithographie. AM Ceramics 2018, Wien, AT, 10-08 to 10-10 ●○
Kübler Jakob Joining of Inorganic Materials: Torsion shear testing of ceramic joints for components design. CIMTEC 2018, Perugia, IT, 06-04 to 06-07 ●○
Ligon Clark/Blugan, G/Dalcanale, F./Kuebler, J. Production of improved SiC and SiCN ceramics from polycarbosilane and polysilazane composites. 9 th International Conference on "Times of Polymers and Composites", Ischia, IT, 06-19 to 06-22 ●
Ozog Paulina/ 3-Dimensional Shaping of Ceramic Materials. PhDs Gathering – Empa Akademie, Dübendorf, 08-22 to ●○
Ozog Paulina Additive manufacturing of ceramic materials by Digital Light Processing. PhD Seminar – Empa Akademie, Dübendorf, 09-27 ●○
Ozog Paulina/Kata, D./Graule, T. Additive manufacturing of AlN based UV-curable dispersions. CIMTEC 2018, Perugia, IT, 06-04 to 06-07 ●
Ozog Paulina/Kata, D./Graule, T. Shaping of AlN through UV-curable dispersions. Polish Ceramics, Cracow, PL, 09-10 to 09-12 ●

Pfeiffer Stefan/Graule, T.

FUORCLAM: Fundamental Understanding of Oxide Refractory Ceramics and Laser Additive Manufacturing – a breakthrough approach for the direct Laser Manufacturing of High Performance Ceramics. DKG-Jahrestagung, Munich, DE, 04-09 to 04-13 ◆

Sebastian Tutu/Clemens, F.

Novel approach to increase the electrical conductivity of polymer composite fibers. COST-Meeting, Bucharest, RO, 09-05 to 09-08 ●

Sebastian Tutu/Michalek, A./Lusiola, T./Clemens, F.

Synthesis of BaTiO₃ nanofibres and their influence on the properties of Barium titanate composite fibers. CIMTEC 2018, Perugia, IT, 06-04 to 06-07 ●

Top Jens/A. Braun/B. S. Mun/C. E. Housecroft;

Dye sensitization of photoelectrodes with copper based sensitizer molecules. SCS Fall Meeting (EPFL), Lausanne, 09-07 ◆ ○

Top Jens/A. Braun/B. S. Mun/C. E. Housecroft

Dye sensitization of photoelectrodes with copper based sensitizer molecules. ChemCYS 2018, Blankenberge, BE, 02-21 to 02-23 ●

Vallachira-Warriam Pradeep

Polymer Derived Silicon Oxycarbide Ceramics for Li-ion Storage Applications. Empa Postdocs-II & PSI-Fellow II-3i Retreat 2018, Dübendorf, 09-21 ◆ ○

Vallachira-Warriam Pradeep

Polymer Derived Ceramics for Biomedical Applications. MSE Conference – 2018, Darmstadt, DE, 09-25 to 09-29 ●

Partl Manfred

Improving Longitudinal Joints. STIAS Conference, Stellenbosch, ZA, 03-02 ● ○

Partl Manfred

Rilem and its 50 Years of Impact on Asphalt Science and Technology. 2018 ISAP Conference of the International Society for Asphalt Pavements, Fortaleza, BR, 06-19 to 06-21 ● ○

Poulikakos Lily

Multi Scale Evaluation of Reclaimed Asphalt Pavement (RAP). 3rd International Conference on Transportation Infrastructure and Materials: Smart and Sustainable Transportation Infrastructure (ICTIM), Tianjin, CN, 06-01 to 06-04 ● ○

Poulikakos Lily

Rilem symposium chemo mechanical characterization of bituminous materials, Braunschweig, DE, 09-17 to 09-18 ▲

Raab Christiane

Asphalt Interlayer Bonding. MESAT Conference 2018, Beirut, LB, 07-04 to 07-06 ● ○

Zaumanis Martins

Design and quality control of asphalt mixtures containing reclaimed asphalt. 4th annual conference "Research in road engineering", Riga, LV, 01-23 ● ○

Raab Christiane/Arraigada, Hean, Partl

Structural Issues. Visit of Russian Delegation COMPANY: OOO "M-SERTIFIKATSIYA" (also Scientific Research and Testing Center "MGSU STROY-TEST": testing of building materials; scientific and technical support of, Empa, 01-23 ● ○

Raab Christiane/Ingrid Camargo/Manfred Partl

Ageing and performance of warm asphalt mixtures. ISAP Day at Transportation Research Board Conference (TRB), Washington D.C., US, 01-07 ● ○

Raab Christiane/Manfred Partl

Structural Resistance of Bridge Deck Pavement Systems. ISAP Conference 2018, Fortaleza, BR, 06-19 to 06-21 ◆ ○

Raab Christiane/Manfred Partl/A.O. Abd El Halim/Laura Ducasse

Assessment of Interlayer Bonding Properties with Dynamic Testing. ISAP Conference 2018, Fortaleza, BR. 2014-06-19 to 06-21 ● ○

Zaumanis Martins

Mischgut aus 100% Recyclingmaterial. Schweizerische Mischgut-Industrie Tagung 2018, Bern, 02-02 ● ○

Zaumanis Martins

Mischgut aus 100% Recyclingmaterial. 11 EPW Kolloquium, Thalwil, 03-21 ● ○

Zaumanis Martins

Mix design for hot mix recycling of RAP. ISAP day 2018, Washington DC, US, 01-07 ● ○

Zaumanis Martins/Cavalli Maria Chiara/Poulikakos Lily D.

Comparing different rejuvenator addition locations in asphalt plant based on mechanical and chemical properties of binder. Transportation Research Board 97th Annual Meeting, Washington DC, US, 01-07 to 01-11 ◆

Zaumanis Martins/Cavalli Maria Chiara/Poulikakos Lily D

Design of 100% RAP Hot-Mix Asphalt to Balance Rutting and Cracking Performance. International Society for Asphalt Pavements conference 2018, Fortaleza, BR, 06-19 to 06-21 ●

Zaumanis Martins

Engineered presentation. E&E Event 2018, Berlin, DE, 06-14 to 06-15 ● ○

Zaumanis Martins

Re-using the reclaimed asphalt. Organic binders in road construction, Moscow, RU, 11-22 to 11-23 ● ○