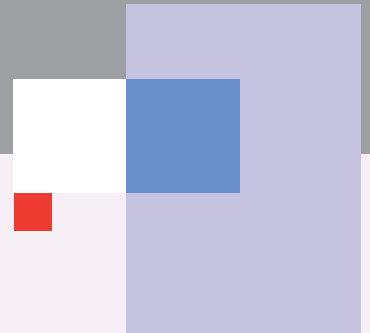


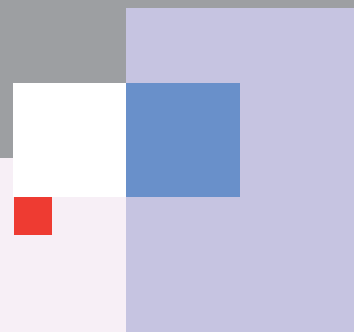
Empa's academic activities in 2010



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Empa's academic activities in 2010

PHD Awards



Advanced Fibers	Guex, Géraldine / Fortunato, Giuseppe / Körner, Enrico	Young Investigator Award, 2 nd EACTS meeting on cardiac and pulmonary regeneration, Vienna (AT)
	Körner, Enrico	Poster Award, 4. Aachen-Dresden International Textile Conference, Dresden (DE)
Analytical Chemistry	Blüthgen, Nancy	Auszeichnung aus dem Legat zur Prämierung hervorragender wissenschaftlicher Arbeiten für Masterarbeit, Universität Zürich
	Homazava, Nadzeya	Fakultätspreis Chemie für beste Dissertation, Universität Bern
	Schmid, Peter	Best Publication Award, 20 th Society of Environmental Toxicology and Chemistry meeting (SETAC-Europe), Sevilla (ES)
Analytical Chemistry / Corrosion and Materials Integrity	Ulrich, Andrea / Ott, Noemi / Homazava, Nadzeya / Schmutz, Patrik	Best Poster Award, European Symposium on Atomic Spectrometry (ESAS), Wroclaw (PL)
Electronics/Metrology/ Reliability	Sanabria, Sergio / Furrer, Roman / Neuenschwander, Jürg / Sennhauser, Urs	Student Paper Competition Award, IEEE International Ultrasonics Symposium, San Diego (USA)
Functional Polymers	Fardel, Romain	Silbermedaille für Dissertation der ETH Zürich
	Kylberg, William	Bestes Poster, 8. Schweizerische Photovoltaik-Tagung, Winterthur
	Shaw-Stewart, James	Best Poster Award, European Research Society Meeting (E-MRS), Strasbourg (FR)
High Performance Ceramics	Chen, Qianli	2 nd Poster Prize Award, Swiss Society for Crystallography (SSCr) Annual Meeting, Geneva
	Graule, Thomas	KERAMOS Award zur besonderen Würdigung langjähriger Kooperation mit der Technischen Universität AGH, Krakau (PL)
	Heinecke, Judit	Hennicke-Preis für beste Diplomarbeit, Deutsche Keramische Gesellschaft (DKG), Hermsdorf (DE)
	Salehi, Mehdi	Best Poster Award in the Category Shaping, 11th International Conference on Ceramic Processing Science (ICCP-11), Zürich
Joining and Interface Technology	Janczak-Rusch, Jolanta / Sosnowska, Karolina / Pawelkiewicz, Magdalena	Best Poster Award, AMT: XIX International Physical Metallurgy and Materials Science Conference, Zakopane (PL)
Materials-Biology Interactions	Bürki, Tina	Best Poster Award, 2 nd NanoImpactNet Conference, IST, Lausanne
Mechanics for Modelling and Simulation	Holdsworth, Stuart R.	ASTM, American Society for Testing and Materials Award of Appreciation for his contributions to the formulation of ASTM Standards (USA)
	Sauter, Michael	Venture 2010: 2. Platz in Phase 1 unter den 10 ersten Preisträgern mit den besten Geschäftsideen für "compliant concept"; ETH Zürich

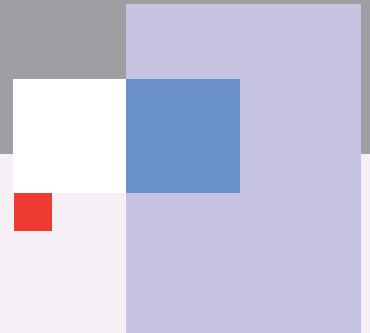
Empa's academic activities in 2010

Awards

	Sauter, Michael	KTI Medtech Award für innovatives Pflegebett (compliant Concept), Bern
	Sauter, Michael/ Maggi, Andrin/ Kaus, Stephane/ Sauter, Florian	Empa Innovation Award für innovatives Pflegebett (compliant Concept), Dübendorf ◆
nanotech@surfaces	Gaspari, Roberto	Best Poster Award, 5 th European School in Material Science, Ljubljana (SLO)
Protection and Physiology	Frackiewicz, Joanna	Best Poster Award, Empa PhD Symposium, Dübendorf
	Stämpfli, Rolf	Posterpreis, Jahreskongress der Gesellschaft für Orthopädie und Traumatologie im Sport, München (DE)
Protection and Physiology	Wettenschwiler, Patrick	Willi-Studer-Preis für besten Masterarbeit, ETH Zürich
Solid State Chemistry and Catalysis	Populoh, Sascha	Honda Initiation Grant
Structural Engineering	Boberg, Maria	Poster Award, EPFL
Structural Engineering	Saukh, Olga	PhD Academic Award für beste Dissertation, European Conference on Wireless Sensor Networks (EWSN), Coimbra (PT)
Thin Films and Photovoltaics	Chirila, Adrian	Best Presentation Award, 35 th IEEE Photovoltaic Specialists Conference, Hawaii (USA), and Best Poster Award, 25 th European Photovoltaic Solar Energy Conference, Valencia (ES)
Wood	Hillebrand, Konrad	Leo-Schörghuber-Preis für Bachelor-Arbeit an der Albert-Ludwigs-Universität, Freiburg (DE)
	Ho, Thi Thu Thao	2 nd Best Oral Presentation, Empa PhD Symposium, Dübendorf ◆
	Jockwer, Robert	Friedrich-Wilhelm-Preis für Diplomarbeit und F.C.Trapp-Preis für ausserordentliche Gesamtleistungen, Rheinisch Westfälische Technische Hochschule (RWTH), Aachen (DE)
	Schwarze, Francis	Ernennung zum Fellow der International Academy of Wood Science
	Zillig, Wolfgang	Leo-Schörghuber-Preis für Doktorarbeit an der Katholieke Universiteit, Leuven (BE)

Empa's academic activities in 2010

Publications



Publications	4
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Civil and Mechanical Engineering	17
Materials meet Life	25
Information, Reliability and Simulation Technology	29
Mobility, Energy and Environment	34

Advanced Materials Processing

Bidiville, A.

[Wafer sawing processes: From Microscopic phenomena to macroscopic properties](#),

PhD, soutenance 18 mai 2010 à Neuchâtel, Institut de Microtechnique (IMT), Université de Neuchâtel.

Bidiville, A./Heiber, J./Wasmer, K./Habegger, S./Assi, F.
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Bradbury, C. R./Kuster, L./Fermin, D. J.

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Electrochemical and Solid-State Letters 2010, 13(7), G60 – G63 *

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[Electric insulation of a FeSiBC soft magnetic amorphous powder by a wet chemical method: identification of the oxide layer and its thickness control](#).

Acta Materialia 2010, 58(17), 5695 – 5703 (joint paper) *

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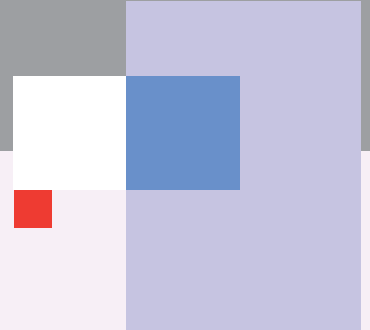
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Net-Shape Al-6061/SiC nanocomposites by powder injection
moulding, Powder Metallurgy – PM2010, Florence, IT, 10-10 thru
14 ♦

Stir, M./Nicula, R./Ishizaki, K./Vaucher, S.
Kinetics of high-temperature phase transitions in magnetite
exposed to separate E or H microwave fields, 11th Lahnwitzsemi-
nar on Calorimetry, Rostock – Warnemünde, DE, 06-06 thru 11 ▼

Vaucher, S./Stir, M./Nicula, R./Catala Civera, J.-M./Ishizaki, K.
Collection of Experimental Data During Microwave Processing
as Modeling Inputs,
12th Seminar «Computer Modeling in Microwave Engineering and
Applications», Grenoble, FR, 03-08 thru 09 ♦ ♦

Vaucher, S./Stir, M./Nicula, R./Catala Civera, J.-M./Ishizaki, K./
Radu, N.
Microwave Crystallization of Amorphous Fe₈₅B₁₅ and
Fe₈₂Si₅B₁₃ Alloys: Time-Resolved Synchrotron Radiation X-ray
Diffraction Experiments, 17th International Symposium on
Metastable, Amorphous and Nanostructured Materials,
ISMANAM 2010, Zurich, 07-04 thru 09 ♦

Vaucher, S./Stir, M./Nicula, R./Catala Civera, J.-M./Ishizaki, K.
Microwave-induced electromigration in multicomponent metallic
alloys, IEEE MTT 2010 International Microwave Symposium,
Anaheim, US, 05-23 thru 28 ♦

Vaucher, S./Stir, M./Nicula, R./Ishizaki, K.
4D Tomography: a spy in the microwave / Transport in Porous
materials and in networked microstructures – TransPore,
PSI, 08-19 thru 20 ♦

Wasmer, K.
Vorhersage Restlebensdauer / Fehlerfreie Bearbeitung von
Metallen – keine Kunst, Biel, 06-01 ♦ ♦ ♦

Corrosion and Materials Integrity

Beni, A./Bauer, B./Gille, P./McGrath, R./Barthés, M. G./Schmutz, P.
Characterization of Aqueous Oxidation and Corrosion
Mechanisms of Al-Cr-Fe Complex Metallic Alloys in relation with
surface properties, C-Mac Days, Dresden, DE, 11-14 thru 19 ♦

Beni, A./Ott, N./Guseva, O./Suter, T./Ulrich, A./Schmutz, P.
Characterization of the corrosion mechanism of Al-Cr-Fe Complex
of Metallic Alloys CUSO Summer School in Nanoelectrochemistry,
Villars, 11-05 thru 09 ▼

Beni, A./Schmutz, P.
Oxidation and Corrosion Mechanisms of Al- Cr- (Cu)- Fe Complex
Metallic Alloys', Workshop on Electrochemical Methods and
Synchrotron radiation in Material Science, ESRF (Grenoble), FR,
02-01 ♦ ♦

Beni, A./Ura, E./De Rose, J. A./Schmutz, P.
Oxidation and Corrosion mechanisms of Al-Cr-Fe Complex
Metallic Alloys and their Influence on Functional Surface
Properties, 61th Meeting of the International Society of
Electrochemistry, Nice, FR, 09-26 thru 10-01 ♦

Beni, A./Ura, E./Parle, J./Warde, M./Bauer, B./Gille, P./McGrath, R./
Barthés, M. G./Schmutz, P.
Characterization of oxidation behaviour and aqueous corrosion
mechanism of Al-Cr-Fe CMA, 5th CMA Euroschool in Materials
Science, Hotel Mons (Ljubljana), SI, 05-24 thru 30 ▼

Breimesser, M.
Electrochemical noise of SCC in stainless steels: A combined
macro- and micro-electrochemical approach,
EUROCORR 2010, Moskau, RU, 09-13 thru 17 ▼

DeRose, J. A./Abodi, L./De Graeve, I./Van Damme, S./Suter, T./Terry, H./Deconinck, J./Schmutz, P.

Comparison of Chromate and Cerium Based Inhibitors for Al 2024: Experimental Input Data and Modeling Approach, Sicom Workshop Microscale Modelling, Airbus Deutschland, Bremen, DE, 11-10 ♦

DeRose, J. A./Suter, T./Balkowiec, A./Michalski, J./Kurzydowski, K. J./Schmutz, P.

Localized Corrosion Behavior of an Al 2024 Alloy with a Higher Cu to Mg Ratio, Annual Meeting of the International Society of Electrochemists (ISE), Nice, FR, 09-26 thru 10-10 ♦

and Sicom Workshop Microscale Modelling, Airbus Deutschland, Bremen, DE, 11-10 ♦

Faller, M.

Nichtrostende Stähle – Spezielle Anwendungen und angepasste Lösungen. und Stähle unter atmosphärischen Bedingungen – wann welche Qualität?, 3-Länder-Korrosionstagung, Berlin, DE, 04-10 thru 20 ♦

Zustandsuntersuchung an metallischen Bauteilen in Hallenschwimmbädern, Annual Meeting of the GfKorr Group «Korrosion im Bauwesen », Helgoland, DE, 06-15 ♦ ♦

Guseva, O.

FEM model for intergranular corrosion of aluminium alloys, Sicom Workshop Microscale Modelling, Airbus Deutschland, Bremen, DE, 11-10 ♦

Lübben, J./Schmutz P.

Scanning Kelvin Probe Force Study on the local humidity-dependant surface reactivity of a WC-Co metallic composite system, Seing at the Nanoscale VIII Conference, Basel, 08-30 thru 09-01 ♦

Schmutz, P.

In-vitro Investigation and Tailoring of Corrosion Mechanisms for Biodegradable Mg-Alloys Implants; Annual Meeting of the Swiss Society for Biomaterials, Empa Dübendorf, 05-05 ♦ ♦

Symposium D5: High Resolution Characterization of Corrosion Processes 2, 218th Electrochemical Society Meeting, Las Vegas, US, 11-10 thru 14 ♦

Schmutz, P./Lübben, J./Suter, T.

Microscale Corrosion research@Empa; General Motors Scientific Symposium, Warren, MI, US, 08-10 ♦ ♦

Submicrometer surface reactivity investigation by Scanning Kelvin Probe Force and Nanocapillary methods, 218th Electrochemical Society Meeting, Las Vegas, US, 11-10 ♦ ♦

Schmutz, P./Suter, T.

Electrochemical Investigation of Microstructural Influence on Corrosion Processes, Schweizerischer Verband für Materialwissenschaft und Technologie SVMT, Empa Dübendorf, 08-11 ♦ ♦

Suter, T.

Corrosion Research at Empa, Internationale Zusammenarbeit «Korrosion initiierte Krebserscheinungen bei Implantaten », Leitung: AO, Davos, Schweiz, an der Department of Anatomy, Ludwig-Maximilian Universität, München, DE, 09-12 ♦ ♦

Suter, T.

Electrochemical Corrosion Studies on Metallic Micro- and Nanostructures, Methods and Applications, CUSO – Summer School «Nanoelectrochemistry », Universität Bern, Villars, 09-05 thru 09 ♦ ♦

Electrochemical Processes in Corrosion Research, 26th One-Day-Symposium Electrochemistry Laboratory, PSI, Villigen, 05-05 ♦ ♦

Multi-Ion-Transport Corrosion Modelling: The challenge of appropriate input parameters, Sicom Workshop Microscale Modelling, Airbus Deutschland, Bremen, DE 11-09 thru 11 ♦ ♦

Submicro and Nanoelectrochemical Studies, International Workshop «Challenges for micro-capillary electrochemical and corrosion research», Technical University of Denmark, Copenhagen, DK, 04-26 ♦ ♦

Suter, T./Schmutz, P.

Submicro and Nanoelectrochemical Corrosion Studies, 8th International Symposium on Electrochemical Micro & Nanosystem Technologies, EMNT10, Cannes Mandelieu, F, 09-21 thru 24 ♦

Ulrich, A./Ott, N./Homazava, N./Schmutz, P.

Novel Online Micro Flow Capillary FI-ICP-MS Set-up with Electrochemical Control for Time- and Element resolved Investigation of the Corrosion Behaviour of Metals, European Symposium on Atomic Spectrometry 2010, Wroclaw, PL, 05-09 thru 08-09 ▼

Electron Microscopy Center

Erni, R.

Symposium A02: Aberration-Corrected Electron Microscopy: Exploring Materials Through New Eyes, Microscopy and Microanalysis 2011, Portland, US, 08-01 thru 05 ♦

Transmission Electron Microscopy of Graphene: Stability and Dynamics of Adatoms Adatoms and Ad and Ad-molecules, Intel European Research and Innovation Conference, Leixlip, IE, 10-12 thru 14 ♦ ♦

Versatility of Electron Microscopy in Materials Science, CCMX-NMMC Analytical Platform Workshop, Dübendorf, 06-03 ♦ ♦

Parlinska-Wojtan, M.

Substrate hardness and fracture damage: TEM investigation of plastically deformed TiN, 3rd Empa-WUT-NIMS WORKSHOP, Dübendorf, 09-08 thru 10 ▼

and 12th International Conference on Plasma Surface Engineering, Garmisch-Partenkirchen, 09-13 thru 19 ▼

Functional Polymers

Araujo de Castro, F./Heier, J./Fan, B./Nüesch, F./Hany, R.
Charge extraction in organic solar cells: how the organic-metal interface can lead to kinks in J-V characteristics, ICSM 2010, Kyoto, JP, 07-04 thru 09 ♦

Benmansour, H./Araujo de Castro, F./Nagel, M./Heier, J./Hany, R./Nüesch, F.
Counterion effects in thin cationic dye films and photovoltaic devices, QUANTSOL 2010, Breils (GR), 03-08 thru 12 ♦ ♦

Chatterjee, S./Nüesch, F./Chu, B.
Study of structural and tensile properties of carbon nanotubes and graphene reinforced polyamide 12 nanocomposites; Nanotec10: Carbon nanoscience and nanotechnology, Oxford University, GB, 09-01 thru 04 ▼

Chu, B.
Nanocomposite science and technology, PhD Winterschool in Dielectric Elastomer Transducers, Ascona PhD Winter school, 01-10 thru 16 ♦ ♦

Chu, B./Hollertz, R./Nüesch, F.
Nanocomposites reinforced with functionalized carbon nanotubes and graphenes, 2. Symposium «Nanostrukturierte Polymere», Bayreuth, DE, 10-17 ♦ ♦

Production of master batches with functionalized carbon nanotubes and Graphenes – from science to market, Nanotech 10, Oxford University, GB, 09-01 thru 04 ♦

Fan, B./Hany, R./Nüesch, F./Heier, J.
Polymethine Organic Solar Cells, nano tech 2010 International Nanotechnology Exhibition and Conference, Tokyo, JP, 02-17 thru 19 ▼

Fisch, M./Armbruster, T./Rentsch, D.
Mullite-type Al₅BO₉ and Al₁₈B₄O₃₃, a crystal-chemical puzzle? IMA 2010: The 20th general meeting of the international mineralogical association, Budapest, HU, 08-21 thru 27 ▼

Geiger, T./Matsumura, T./Simeunovic, M./Kuster, S./Hochleitner, S./Heier, J./Nüesch, F.
Farbstoffsolarzellen, Nanotech 2010, Tokyo, JP, 02-17 thru 19 ▼ ♦ ♦

Geiger, T./Meyer, T./Kuster, S./Simeunovic, M./Hochleitner, S./Nüesch, F.
Unsymmetrical Squaraine Dyes for Efficient Conversion of Low Energy Photons on TiO₂ Nanocrystalline Films, Solar'10 – Nano/Molecular Photochemistry and Nanomaterials for Green Energy Development, Kairo, EG, 02-14 thru 17 ♦ ♦

Geiger, T./Meyer, T./Simeunovic, M./Kuster, S./Hochleitner, S./Nüesch, F.
Unsymmetrical Squaraine Dyes for Dye Sensitized Solar Cells, 8. Nationale Photovoltaik Tagung 2010, Winterthur, 02-04 thru 05 ▼ ♦ ♦

Geiger, T./Shcherbakova, I./Kuster, S./Hochleitner, S./Nüesch, F.
Farbstoffsolarzellen, Cleantech-Expo und Innovationskonferenz 2010, Bern, 11-04 ▼ ♦ ♦

Geiger, T./Simeunovic, M./Kuster, S./Hochleitner, S./Nüesch, F.
Farbstoffsolarzellen, Zürcher Umwelttage 2010, Zürich, 05-28 thru 29 ▼ ♦ ♦

Unsymmetrical Squaraine Dyes for Dye Sensitized Solar Cells, Nanotechnology for Sustainable Energy 2010, Obergurgl, AT, 07-04 thru 09 ▼

Hany, R.
Strategies to improve cyanine dye multi layer organic solar cells, 25th EU PVSEC, Valencia, ES, 09-08 ♦

Hany, R./Heier, J.
Structured organic cyanine dye thin films for applications in photovoltaics and photonics; National Physical Laboratories, London, GB11-04 ♦ ♦

Heier, J./Steiger, R./Nüesch, F./Hany, R.
Instant Formation of Cyanine J-and H-aggregates during phase separation, ICSM 2010, Kyoto, JP, 07-04 thru 09 ♦

and Annual Fall Meeting of the Swiss Chemical Society, Zürich, 09-16 ▼ ♦

Kuster, S./Hochleitner, S./Nüesch, F./Geiger, T.
Unsymmetrical NIR absorbing squaraine dye dimer for DSC applications, Molecular Electronics 2010, Emmetten, 01-05 thru 09 ▼

Kylberg, W./Araujo de Castro, F./Chabreck, P./Hany, R./Nüesch, F.
Transparent fabric electrodes for organic photovoltaics, Plastic Electronics 2010, Dresden, DE, 10-19 thru 21 ♦

and MRS Fall Meeting 2010, Boston, US, 11-29 thru 12-03 ♦ ♦

Löwe, Ch.
Dielektrische Elastomeraktoren – eine Technologie der Zukunft?, 2. Themenabend Intelligente Polymere Winterthur, Winterthur, 04-03 ♦ ♦

Elastomers and Polymers and their Properties.
PhD Winterschool, Dielectric Elastomer Transducers, Ascona PhD Winter school, 01-10 thru 16 ♦ ♦

Molberg, M./Leterrier, Y./Plummer, Ch. J. G./Löwe, C./Opris, D./Clemens, F./Manson, J.-A. E.
Elastomer actuators: systematic improvement in properties by use of composite materials, Electroactive Polymer Actuators and Devices (EAPAD), San Diego, US, 03-09 thru 12 ♦

Molberg, M./Opris, D. M./Walder, Ch./Löwe, CH./Nüesch, F. A./Leterrier, Y./Plummer, Ch. J. G./Manson, J.-A. E./Bauer, S.
Influence of Frequency Dependent Dielectric and Mechanical Properties on the Performance of Dielectric Elastomer, Actuator 2010, Bremen, DE, 06-14 thru 16 ▼

Nüesch, F.
Cyanine thin film solar cells, International Conference on Photochemical Conversion of Solar Energy, Coimbatore, IN, 03-30 thru 04-01 ♦ ♦

Nüesch, F./Andric, K.
Transparent conducting Electrodes for Photovoltaics, Workshop on Transparent Conducting Electrodes for Photovoltaics, Bern, Stade de Suisse, 01-25 ♦

Opris, D.

Material development for dielectric elastomer actuators and energy harvesting, FMF-Kolloquium, Schluchsee, DE, 10-11 thru 12 ♦ ♦

and PhD Winterschool in Dielectric Elastomer Transducers, Ascona, 01-10 thru 16 ♦ ♦

and International Symposium on Polymer Chemistry, PC 2010, Suzhou, CN, 06-02 thru 06 ♦

and Danfoss, PolyPower, Nordborg, DK, 06-24 thru 25 ♦ ♦

Opris, D./Molberg, M./Löwe, C./Nüesch, F./Rupper, P./Crespy, D. Dielectric elastomers with increased dielectric properties as soft actuators, Annual Fall Meeting of the Swiss Chemical Society, Zürich, 09-16 ▼

Shaw-Stewart, J./Lippert, T./Nagel, M./Nüesch, F./Wokaun, A. LIFT – A universal OLED pixel deposition technique?, Plastic Electronics 2010, Dresden, DE, 10-19 thru 21 ♦

Toth, R./Heier, J./Schabikowski, M./Braun, A./Graule, T. Hematite pillar structures formed by electrohydrodynamic instability, SPS Annual Meeting 2010, Basel, 06-21 thru 22 ▼

High Performance Ceramics

Bakumov, V.

Mechanical and tribological properties of polymer-derived Si/C/N miniparts fabricated by direct casting, ICCPS-11, 11th Int. Conference on Ceramic Processing Science, ETH, Zürich, 08-29 thru 09-01 ▼

Blugan, G.

Processing and properties of alumina / carbon nanofiber ceramic composites, ICCPS-11, 11th Int. Conference on Ceramic Processing Science, ETH, Zürich, 08-29 thru 09-01 ♦

Bora D.

Effect of Annealing Temperature and Dewelling time on the Photoelectrochemical Behavior of Nanostructured Hematite Thin Film, Annual Meeting of the Swiss Physical Society, Basel, 06-21 thru 22 ▼

Electronic Properties of Hematite Nanoparticles and Films for Photoelectro-chemical Solar Energy Conversion.

and Ex-situ Electronic Behavior of Haematite Film Under Operating Condition in a Photoelectrochemical (PEC) Cell.

and Metal Oxide-biomolecule Hybrid Nanoarchitecture as Biomimetic Light Harvesting Complex for Photoelectrochemical Solar Hydrogen Generation. 2010 MRS Spring Meeting, Moscone West and San Francisco Marriott, San Francisco, CA, US, 04-05 thru 09 ♦

Harness Sunlight by Nanobioscience Approach for Photoelectrochemical Hydrogen Generation, Argonne National Laboratory, Argonne, IL, US, 04-11 thru 13 ♦ ♦

Hematite based hybrid nanoarchitectures for photoelectrochemical water splitting, International School of Photonics, Cochin University of Science and Technology, Kerala, IN, 11-22 ♦

Hydrothermally fabricated nanostructures for photo-electrochemical water splitting, Empa PhD students symposium 2010, Dübendorf, 10-07 ♦

Interfacial Spacing Mediated Improvement in the Photoelectrochemical Behavior of Hematite-Light Harvesting Protein Conjugate, 3rd Int. Nanobio Conference, ETH, Zürich, 08-24 thru 27 ▼

Bora, D./Braun, A./Constable, E. C./Graule, T.

Interaction of light harvesting membrane protein with metal oxide surface and interfacial influence on the photoelectrochemical behavior, Gordon Research Conferences, Biointerface Science, Les Diablerets, 09-05 thru 10 ▼

Braun, A.

Application of Hard and Soft X-ray Spectroscopy and Scattering in Lithium Ion Battery Research.

and Assessment of Defects in Hematite, Iron Perovskites and Ti-oxynitride with soft X-ray and Photoelectron Valence Band Spectroscopy. 2010 MRS Spring Meeting, Moscone West and San Francisco Marriott, San Francisco, CA, US, 04-05 thru 09 ♦ ♦

Chemistry, Structure and Transport Processes in Solid Oxide Fuel Cell Components Investigated With X-ray and Neutron Methods.

and Correlation of Transport Properties and Valence Band Spectral Characteristics in Iron Perovskites as a Function of Temperature and Substitution Parameter. 2010 MRS Spring Meeting, Symposium W: Diagnostics and Characterization of Energy Materials with Synchrotron and Neutron Radiation, Moscone West and San Francisco Marriott, San Francisco, CA, US, 04-05 thru 09 ♦ ♦

Ceramic proton conductors for intermediate temperature solid oxide fuel cells and other electrochemical applications, Int. Conference on Neutrons for Global Energy Solutions, Bonn-Bad Godesberg, DE, 09-26 thru 29 ♦

Probing energy materials at the molecular scale with X-ray spectroscopy and neutron scattering, Kaunas Int. Summer School and Conference, Palanga, LT, 08-27 thru 31 ♦ ♦

Some Applications of Synchrotron and Neutron Scattering and Spectroscopy to Energy Materials Research, Annual Meeting of the Swiss Society for Crystallography (SSCr), Geneva, 09-17 ♦ ♦

and Sandia National Laboratories Electrochemistry Seminar, Livermore, Cal, US, 11-02 ♦ ♦

and NIMS Conference 2010, Tsukuba, JP, 07-12 thru 14 ♦ ♦

X-ray and photoelectron spectroscopy on photocatalysts and materials for solar photoelectrochemical applications, PSI Elektrochemie Seminar, Villigen PSI, 10-25 ♦ ♦

Braun, A./Heske, C./Marcus, M./Guo, J.

Defects in Inorganic Solids and their Relation to Electronic Properties, Advanced Light Source Users' Meeting, Lawrence Berkeley National Laboratory, Berkeley, Ca., US, 10-14 ♦

Burnat, D./Heel, A./Holzer, L./Kata, D./Graule, T.

Spray pyrolysed and lame sprayed $\text{La}_{0.2}\text{Sr}_{0.7}\text{TiO}_3$ powders applicable for Solid Oxide and Direct Carbon Fuel Cell Anodes, European Fuel Cell Forum, Luzern, 06-29 thru 07-01 ♦

Chen, Q.

Correlation of Structure and Conductivity of Proton Conducting Ceramics, MRS Spring Meeting, San Francisco, CA, US, 04-05 thru 09 ♦

Correlation of Structure and Conductivity of Proton Conducting Ceramics – Potential electrolyte material for intermediate temperature fuel cells (2nd Poster Prize Award), Annual Meeting of the Swiss Society for Crystallography (SSCr), Geneva, 09-17 ▼

Crystallographic structure, electronic structure and proton diffusion in ceramic proton conductors, 2010 Advanced Light Source Users' Meeting, Lawrence Berkeley National Laboratory, Berkeley, US, 10-13 thru 15 ▼

Effect of lattice volume and compressive strain on the conductivity of ceramic proton conductors, ICCPS-11, 11th Int. Conference on Ceramic Processing Science, ETH, Zürich, 08-29 thru 09-01 ♦

Protons in lattice confinement: A pressure dependency study on the Conductivity of Proton Conducting Ceramics, Empa PhD Students' Symposium 2010, Dübendorf, 10-07 ♦ ▼

Clemens, F.

Investigation on Attrition Resistance on Highly Porous Diatomite and Gamma-Alumina Based Material Produced by Extrusion Process Int. Conference on Cellular Materials, Dresden, Germany, Int. Conference on Cellular Materials, Dresden, DE, 10-27 thru 30 ♦

Microstructural and electromechanical comparison of different piezoelectric PZT based single fibres and Influence of radial gradient structures in ferroelectric $\text{Pb}(\text{Zr,Ti})\text{O}_3$ fibres on their ferroelectric properties, 19th Int. Symposium on the Applications of Ferroelectrics, Edinburgh, GB, 08-09 thru 12 ♦ ♦

Smart materials and the use for sensor and actuator applications, Conference, Smart Materials, University of Silesia, Katowice, PL, 01-27 ♦

Thermoplastic Shaping – Advances in Extrusion Processes, 12th Int. Ceramic Congress CIMTEC 2010, Montecatini Terme, IT, 06-06 thru 11 ♦ ♦

Clemens, F./Rovath, C. F./Graule, T./Klein, A. N.

Processing of short fiber reinforced porous CMCs and MMCs tubes via thermoplastic powder extrusion route, ICCPS-11, 11th Int. Conference on Ceramic Processing Science, ETH, Zürich, 08-29 thru 09-01 ♦

De Hazan, Y.

Functional Nanocomposites from Radiation Curable Colloidal Dispersions – New Microshaping Technologies, 2nd NanoIsrael 2010, Int. Nanotechnology Conference, Tel Aviv, IL, 11-08 thru 09 ♦

Microshaping of UV Curable Fluids – Inorganic/polymer and Inorganic Nanocomposite Fibers, Multilayered Cellular Articles and Pattered Films Faculty of Chemical Engineering, Technion, Israel Institute of Technology, Haifa, IL, 11-02 ♦ ♦

De Hazan, Y./Graule, T.

Synthesis, Microshaping and Consolidation of Functional Radiation Curable Colloidal Dispersions, 1st International and Multidisciplinary Workshop on the Solidification of Colloidal Suspension, Avignon, FR, 09-06 thru 08 ♦

De Hazan, Y./Heinecke, J./Graule, T.

Functional Ceramic and Nanocomposite Fibers, Cellular Articles and Microspheres via Radiation Curable Colloidal Dispersions 11th International Conference on Ceramic Processing Science, ICCPS-11, ETH Zürich, Höggerberg, Zürich, 08-29 thru 09-01 ♦

De Hazan, Y./Heinecke, J./Mueller, G./Graule, T.

Shaping radiation curable colloidal dispersions – from polymer/ceramic fibers and microspheres to gradient porosity ceramic bulk materials, 34th Int. Conference and Exhibition on Advanced Ceramics and Composites (ICACC), Daytona Beach, US, 01-24 thru 29 ♦

Erat, S.

Electronic and Crystallographic Structure of LaSrFeNi -oxides: Potential Cathode Materials for Solid Oxide Fuel Cells, 2010 MRS Spring Meeting, Moscone West and San Francisco Marriott, San Francisco, CA, US, 04-05 thru 09 ♦ ♦

Extensive study on crystallographic, electronic structure and transport properties of LaSrFeNi -oxides: A combination of experimental and theoretical studies, Seminar at Department of Chemistry, Bilkent University, Ankara, TR, 11-25 ♦ ♦

Erat, S./Aksoy, F./Wadati, H./Liu, Z./Graule, T./Gauckler, L. J./Braun, A.

Electronic Structure of Sr and Ni substituted LaFeO_3 : Fe-resonant VB PES and NEXAFS (O K edge, Fe L_{2,3} edge) study, Advanced Light Source Users' Meeting, Lawrence Berkeley National Laboratory, Berkeley, US, 10-13 thru 15 ▼

Erat, S./Braun, A./Metin, H./Demchenko, I./Stolte, W./Graule, T. Near Edge X-ray absorption studies on CdSe thin films grown by Chemical Bath Deposition, Annual Meeting of the Swiss Physical Society, Basel, 06-21 thru 22 ▼

Erat, S./Braun, A./Ovalle, A./Piamonteze, C./Ariffin, A. K./Blume, T./Gauckler, L. J./Graule, T.

High Temperature Crystallographic and Electronic Structure of LaSrFeNi oxides: a combination of Neutron diffraction and Near Edge X-ray Absorption Spectroscopy, Annual Meeting of the Swiss Physical Society, Basel, 06-21 thru 22 ▼

Erat, S./Braun, A./Piamonteze, C./Liu, Z./Graule, T./Gauckler, L. J.

Comparison of theoretical and experimental Fe (2p) x-ray absorption spectra for LaSrFeNi -oxides, 2010 MRS Spring Meeting, Moscone West and San Francisco Marriott, San Francisco, CA, US, 04-05 thru 09 ▼

Flak, D.

Flame-made metal oxide nanopowders for gas sensor application, VII International Workshop on Semiconductor Gas Sensors SGS 2010, Krakow, Poland, Krakow, PL, 09-12 thru 16 ▼

Graule, T.

Ceramic based water filters for bacteria and virus filtration, ICC3, 3rd Int. Congress on Ceramics, Osaka, JP, 11-14 thru 18 ♦ ♦

and Swiss-Polish Science and Technology (SciTec) days, Warsaw University of Technology, Warsaw, PL, 01-14 thru 15 ♦

Shaping of ceramics fibers and gradient porosity ceramic bulk materials applying UV curable dispersions, 12th Int. Ceramic Congress CIMTEC 2010, Montecatini Terme, IT, 06-06 thru 11 ♦

Graule, T./De Hazan, Y.

Neuartige Strategien für die Oberflächenmodifizierung von Nanopartikeln für transparente UV härtende und polyurethanbasierte Beschichtungen, 75. Jahrestagung der Fachgruppe Lackchemie «Farbe, Effekte und Vieles mehr...», Wernigerode, DE, 09-22 thru 24 ♦ ♦

Heinecke J./De Hazan Y./Aneziris, C./Graule T.

Synthesis and properties of cellular alumina articles produced from radiation curable dispersions ICCPS-11, 11th Int. Conference on Ceramic Processing Science, ETH, Zürich, 08-29 thru 09-01 ▼

Heinecke, J./De Hazan, Y./Märkl, V./Aneziris, C./Graule, T.

Synthesis and properties of cellular ceramic materials produced from radiation curable colloidal dispersions, Int. Conference on Cellular Materials, Conference Cellular Materials, Dresden, DE, 10-27 thru 30 ▼

Graule, T./Heinecke, J./Mueller, G./De Hazan, Y.

Shaping of ceramics fibers and gradient porosity ceramic bulk materials applying UV curable dispersions, 12th Int. Ceramic Congress CIMTEC 2010, Montecatini Terme, IT, 06-06 thru 11 ♦

Holzer, L./Hocker, T./Iwanschitz, B./Prestat, M./Münch, B./Cantoni, M.

Establishing the link between SOFC electrode performance and microstructure by means of FIB-tomography and image based modelling, Int. collaborative workshop on 3D analysis of SOFC's, Risoe, DK, 07-06 ♦ ♦

Holzer, L./Hocker, T./Iwanschitz, B.

Assessing the effect of electrode microstructure and degradation, International collaborative workshop on 3D analysis of SOFC's, Risoe, DK, 07-06 ♦

Assessing the effect of electrode microstructure on repeat unit performance and cell degradation, MODVAL, 7th symposium on fuel cell modelling and exp. Valid., Morges, 03-23 thru 24 ♦

Holzer, L./Iwanschitz, B./Muench, B./Cantoni, M.

The microstructure of porous SOFC electrodes: new methodologies for reliable quantification and link with performance, European Fuel Cell Forum, Luzern, 06-29 thru 07-01 ♦

Holzer, L./Keller, L. M./Wepf, R./Münch, B./Marschall, P.

Multiscale Imaging of the Pore Structure of Opalinus Clay, 4th Int. Meeting Clays in Natural and Engineered Barriers for Radioactive Waste confinement, Nantes, FR, 03-29 thru 04-01 ♦

Iwanschitz, B./Mai, A./Holzer, L./Hocker, Th./Schütze, M.

Degradation of Ni-cermet anodes in Solid Oxide Fuel Cells, European Fuel Cell Forum, Luzern, 06-29 thru 07-01 ♦

Keller, L. M./Holzer, L./Wepf, R./Gasser, P./Münch, B./Marschall, P.

3D-geometry and topology of pore pathways Opalinus clay: Implications for gas transport. Transpore 2010, PSI, Villigen PSI, 08-19 thru 20 ♦ ♦

Kuebler, J.

Influence of atmosphere and carbon contamination on activated pressureless infiltration of alumina-steel composites, 14th European Conference on Composite Materials, Budapest, HU, 06-07 thru 10 ♦

Simulation and validation of thermo-mechanical stresses in planar

SOFCs, ICCPS-11, 11th Int. Conference on Ceramic Processing Science, ETH, Zürich, 08-29 thru 09-01 ▼

Metin H./Erat, S./Braun, A./Demchenko, I./Stolte, W./Ari, M./Graule, T.

Electronic Structure and Conductivity of n-type CdS films for Solar Energy Conversion, Annual Meeting of the Swiss Physical Society, Basel, 06-21 thru 22 ▼

Michalow, K.

Is the red-shift necessary to enhance solar light conversion? Some answers based on investigation of TiO₂-M (M = Fe, Cr, W or Mo) flame spray synthesized (FSS) nanopowders, SP3, 3rd Int. Conference on Semiconductor Photochemistry, University of Strathclyde, Glasgow, UK, 04-12 thru 16 ♦

Pouchon, M. A./Cozzo, C./Vaucher, S./Ishizaki, K./Graule, T./

Holzer L./ Günther-Leopold, I./Krepel, J., Mikityuk, K.

PINE – Platform for innovative nuclear fuel, PSI Energietagung, Villigen, 06-11 ♦

Robertson, I./Holzer, L./Prestat, M./Graule, T.

Continuous particle size distribution analysis of porous La_{0.6}Sr_{0.4}CoO_{3-d} cathodes,

European Fuel Cell Forum, Luzern, 06-29 thru 07-01 ♦

Rojas-Ismael, M.

Process chain development for the microfabrication of solid and hollow ferroelectric fibers by co-extrusion, 11th International Conference on Ceramic Processing Science, ICCPS-11, ETH Zürich, Hönggerberg, Zürich, 08-29 thru 09-01 ♦

Salehi, M.

A development of BSCF Feedstock based on thermoplastic binder for production of flat and tubular oxygen separation membranes, ICCPS-11, 11th Int. Conference on Ceramic Processing Science, ETH, Zürich, 08-29 thru 09-01 ▼

Schlenther, E.

Influence of carbon on Ti-activated infiltration of Al₂O₃-steel composites under atmospheric pressure, ICCPS-11, 11th Int. Conference on Ceramic Processing Science, ETH, Zürich, 08-29 thru 09-01 ▼

Steinhausen, R./Kern, S./Pientschke, C./Beige, H./Clemens, F.

Low- and high-field measurement of piezoelectric properties of PZT single fibres, Electroceramics XII, Trondheim, NO, 06-13 thru 16 ♦

Strehler, C.

Influence of the Intergranular Phase on the Cutting Performance of Si₃N₄/SiC Knives for Wood Machining, HT-CMC 7, 7th Int. Conference on High Temperature Ceramic Matrix Composites, Bayreuth, DE, 09-20 thru 22 ♦

Sintering of Si₃N₄/SiC composites for Wood Cutting Tools, ICCPS-11, 11th Int. Conference on Ceramic Processing Science, ETH,

Zürich, 08-29 thru 09-01 ♦

Van Garderen, N.

Investigation of Sintering Temperature on Attrition Resistance of Highly Porous Diatomite Based Material, 3rd Int. Conference on Porous Media and its Applications in Science, Engineering and Industry, Montecatini, IT, 06-20 thru 25 ◆

Investigation on microstructure and attrition resistance of open porous diatomite based granulates manufactured by extrusion method, ICCPS-11, 11th Int. Conference on Ceramic Processing Science, ETH, Zürich, 08-29 thru 09-01 ◆

Van Garderen, N./Clemens, F. J./Graule, T.

Investigation on microstructure by Mercury intrusion porosimetry and nitrogen sorption of highly porous diatomite based materials, Transpore 2010, PSI, Villigen PSI, 08-19 thru 20 ▼

Vogt, U./Wiedenmann, D./Holzer, L./Züttel, A.

Analysis of Degradation and Aging Processes in Solid Oxide Electrolyser Cells, 12th Int. Ceramic Congress CIMTEC 2010, Montecatini Terme, IT, 06-06 thru 11 ◆

Wiedenmann, D./Holzer, L./Gorbar, M./Vogt, U.

Impact of multi-scale pore structure on ion conductivity of asbestos gas separation membranes for alkaline water electrolysis, 4th int. Symposium on Hydrogen and Energy, Wildhaus, 01-24 thru 29 ▼

Wiedenmann, D./Holzer, L./Stojadinovic, J./Gorbar, M./Vogt, U./Herzog, V./Züttel, A./Grobéty, B.

Multi-scale 3D pore structure and ion conductivity of asbestos gas separation membranes for alkaline water electrolysis, Transpore 2010, PSI, Villigen PSI, 08-19 thru 20 ▼

Joining & Interface Technology

Al-Badri, A./Leinenbach, C./Roth, M./Scarlín, B./Hitzek, R.

The effect of high temperature exposure on the interfacial microstructure of Co-coatings on 9-12% Cr steels and Ni-based alloys, 1st International conference on Materials for Energy, Karlsruhe, DE, 07-04 thru 08 ▼

Buhl, S./Leinenbach, C./Spolenak, R./Wegener, K.

Microstructure, residual stresses and shear strength of diamond-steel-joints as a function of brazing parameters, 9th International Conference on Brazing, High Temperature Brazing and Diffusion Bonding, Aachen, DE, 06-15 thru 17 ◆

Chinnam, R. K.

Influence of ultrasonic waves on the solidification of Sn-4% Ag-0.5% Cu alloy, 3rd Empa-WUT-NIMS Workshop «New trends in nanomaterials design and engineering », Empa Akademie, Dübendorf, 09-08 thru 10 ▼

Duarte, L. I./Leinenbach, C./Klotz, U. E./Löffler, J. F.

Phase Diagram Study in the Fe-Ni-Ti-Al System and its Importance in Materials Science, ISMANAM 2010, ETH, Zürich, 07-04 thru 09 ▼

Duarte, L. I./Leinenbach, C./Klotz, U. E./Marker, M./Richter, K./Löffler, J. F.

Phase equilibria in the section FeAl-NiAl-TiAl, TOFA 2010, Porto, PT, 06-12 thru 16 ◆

Elsener, H. R./Leinenbach, C./Neuenschwander, J./Wurz, P./Piazza, D.

Fügen einer beheizbaren Metall-Keramik-Struktur mit eutektischem Au-Ge Lot, 9th International Conference on Brazing, High Temperature Brazing and Diffusion Bonding, Aachen, DE, 06-15 thru 17 ◆

Fauteux, C.

Influence of ultrasonic waves on the solidification behavior of soldered joints, 4th World Congress on Adhesion and Related Phenomena, Arcachon, France, FR, 09-26 thru 30 ◆

Investigating the adhesion properties of bio-mimetic nanostructured surfaces for joining applications, SciTec Days

2010, Warsaw University of Technology, PL, 01-14 thru 15 ◆ ◆

Fauteux, C.

Joining of carbon nanotubes for electronic applications, Intel European Research and Innovation Conference, Intel Corporation, Leixlip, IE, 10-12 thru 14 ▼

and 3rd Empa-WUT-NIMS Workshop «New trends in nanomaterials design and engineering »,

Empa Akademie, Dübendorf, 09-08 thru 10 ◆ ▼

Janczak-Rusch, J.

Lead-free solders and their ecological performance, Annual Joint Working Group Meeting COST MP0602, Slovak Academy of Science, Bratislava, SK, 04-07 thru 09 ◆ ◆

Research approach towards knowledge based design of lead free solder joints, 3rd Empa-WUT-NIMS Workshop «New trends in nanomaterials design and engineering », Empa Akademie, Dübendorf, 09-08 thru 10 ◆ ▼ ◆ ◆

Scientific and technological cooperation between Poland and

Switzerland, SciTec Days 2010, Warsaw University of Technology, PL, 01-14 thru 15 ◆ ◆

TOFA 2010 – Discussion Meeting on Thermodynamics of Alloys, Porto, PT, 09-12 thru 16 ◆

Verbundlote für Metall-Keramik Verbindungen, Hilti CoP Fügen, Fokus «Löten», Hilti, Schaan, LI, 06-08 ◆ ◆

Janczak-Rusch, J./Pawelkiewicz, M./Sosnowska, K. K.

High performance lead free solder joints: novel engineering concepts, AMT 2010 XIXth Physical Metallurgy and Materials Science Conference, Advanced Materials & Technologies, Zakopane, PL, 06-20 thru 23 ▼ ◆

Janczak-Rusch, J./Sosnowska, K. K./Fauteux, C.

Modelling challenges for joining, SciTec Days 2010, Warsaw University of Technology, PL, 01-14 thru 15 ▼

Jin, S./Leinenbach, C./Wang, J./Watson, A./Scott, A./Delsante, S./Borzzone, G.

Experimental Investigation and Thermodynamic Modelling of the Au-Ge-X (X = Cu, Ni) Ternary Systems, COST MP0602 annual meeting, Bratislava, SK, 04-07 thru 09 ◆

and CALPHAD XXXIX, Jeju, KR, 05-23 thru 28 ▼

Jin, S./Leinenbach, C./Wang, J./Duarte, L. I./Watson, A./Scott, A./Delsante, S./Borzone, G./Rappaz, M.
Design of Novel Au-Ge Based High Temperature Solders, Junior Euromat 2010, Lausanne, 07-26 thru 30 ▼

Leinenbach, C.
Joining of advanced components – fundamentals and applications, Gesellschaft Österreichischer Chemiker (GöCh) Seminar, Universität Wien, AT, 11-19 ♦ ♦

Novel Au-based lead-free solders for highly loaded components, Sino-Swiss Workshop EMPA-CSU 2010, Central South University, Changsha, CN, 06-19 ♦ ♦

Leinenbach, C./Jin, S./Valenza, F./Giuranno, D./Novakovic, R./Wang, J./Elsener, H. R./Delsante, S./Borzone, G./Watson, A./Scott, A.
Au-Ge-X (X = Cu, Ni) alloys for novel high-T Lead-free solder materials, TOFA 2010, Porto, PT, 06-12 thru 16 ♦

Leinenbach, C./Baser, T. A./Schindler, H. J.
LCF-Ermüdungsverhalten und Ermüdungsrissschritt in fehlerfreien und fehlerbehafteten gelöteten Stahlproben, 34. Jahrestagung SVMT Fachgruppe Strukturintegrität, Winterthur, 05-05 ♦

Leinenbach, C./Wang, J./Buhl, S./Liu, C.
Simulation of interface reactions of Cu-Sn-Ti based active brazing filler metal with diamond and steel substrates, CALPHAD XXXIX, Jeju, KR, 05-23 thru 28 ♦

Leinenbach, C./Wang, J./Buhl, S./Roth, M.
Thermo-Chemical Design of Brazed Diamond-Metal Joints, CIMTEC 2010, Montecatini Terme, IT, 06-06 thru 11 ♦ ♦

Longtin, R.
Nanocolloidal processing for joining applications, 3rd Empa-WUT-NIMS Workshop «New trends in nanomaterials design and engineering », Empa Akademie, Dübendorf, 09-08 thru 10 ▼

Pawelkiewicz, M.
Modeling of multi-phase solid state reactions on example of IMC growth, 3rd Empa-WUT-NIMS Workshop «New trends in nanomaterials design and engineering », Empa Akademie, Dübendorf, 09-08 thru 10 ♦ ▼

Pigozzi, G.
Novel Method for the Synthesis of Multifunctional Nanoparticles and Other Nanostructures, 3rd Empa-WUT-NIMS Workshop «New trends in nanomaterials design and engineering », Empa Akademie, Dübendorf, 09-08 thru 10 ▼

Roth, M./Galli, M./Liu, Ch./Bissig, V./Janczak-Rusch, J.
Novel Concepts in Joining Technology, Advanced Ceramics and Composites Conference, Daytona Beach, US, 01-25 thru 29 ♦ ♦

Sosnowska, K. K.
Modelling challenges for joining, SciTec Days 2010, Warsaw University of Technology, PL, 01-14 thru 15 ♦ ♦

Sacrificial Passivation as a novel concept for Transient Liquid Phase bonding and related joining processes, Annual Joint Working Group Meeting COST MP0602, Slovak Academy of Science, Bratislava, SK, 04-07 thru 09 ♦ ♦

and 3rd Empa-WUT-NIMS Workshop «New trends in nanomaterials design and engineering», Empa Akademie, Dübendorf, 09-08 thru 10 ♦ ▼

Sosnowska, K. K./Janczak-Rusch, J./Spolenak, R.
Sacrificial Passivation for joints in microelectronics, MRC Graduate Symposium, ETH Zürich, 05-10 ▼

Wang, J./Leinenbach, C./Liu, C.
Development of the thermodynamic and atomic mobility database for active brazing of diamond to steel substrate, CALPHAD XXXIX, Jeju, KR, 05-23 thru 28 ▼

Mechanics of Materials and Nanostructures

Bechelany, M.
ALD of transparent conductive oxide and study of their physical properties, BalticALD 2010 & GerALD 2, Hamburg, DE, 09-16 thru 17 ♦

Bechelany, M./Brodard, P./Elias, J./Michler, J./Philippe, L.
Electrodeposition of Si in a non-oxygenated organic solvent, Nanotech 2010, Anaheim, US, 06-21 thru 24 ▼

Bechelany, M./Brodard, P./Philippe, L./Michler, J.
Extended Domains of Organized Silver and Gold Nanoparticles as SERS Sensors for Molecular Detection, 26th SAOG-GSSI 2010, Fribourg, 01-22 ♦

Bechelany, M./Elias, J./Lévy-Clément, C./Michler, J./Wang, G./Wang, Z./Philippe, L.
Hollow and Ordered Urchin-like ZnO structures by Novel Electrodeposition Method, Nanotech 2010, Anaheim, US, 06-21 thru 24 ♦

Bechelany, M./Mäder, X./Brodard, P./Mook, W./Elias, J./Philippe, L./Michler, J.
Extended Domains of Organized Metallic Nanoparticles and Study of their Physical Properties, Nanotech 2010, Anaheim, US, 06-21 thru 24 ♦

Bechelany, M./Philippe, L./Utke, I./Michler, J.
Grippers and surfaces structuring for micro and nanomanipulation, Journée conjointe GDR Robotique – GDR Mecano, Paris, FR, 06-125 thru 16 ♦ ♦

Bernau, L./Gabureac, M./Utke, I.
Controlled tuning of the Co:C ratio in planar deposits obtained from Co₂(CO)₈ assisted FEBID, FEBIP 2010, Albany NY, US, 07-15 thru 16 ♦ ♦

Electron-impact dissociation of Co₂(CO)₈: Direct nano-scale patterning of high-sensitivity magnetic material using focused electrons beams, Radiation Chemistry Gordon Research Conference, Andover NH, US, 07-18 thru 23 ♦ ♦

Bernau, L./Hedhili, M. N./Utke, I./Swiderek, P.
HREELS study of the electron-induced dissociation of Pt(PF₃)₄, FEBIP 2010, Albany NY, US, 07-15 thru 16 ▼ ♦

Electron-impact dissociation of surface-adsorbed Pt(PF₃)₄: a HREELS study, Radiation Chemistry Gordon Research Conference, Andover NH, US, 07-18 thru 23 ▼ ♦

Brodard, P.

Surface and tip enhanced Raman spectroscopy of nanostructures, Empa-WUT-NIMS Workshop, Dübendorf, 09-09 ♦ ♦

Brodard, P./Bechelany, M./Elias, J./Philippe, L./Jenke, M. G./Utke, I./Michler, J.

Gold nanostructures for surface-enhanced Raman spectroscopy, Annual Fall Meeting of Swiss Chemical Society, Zürich, 09-16 ♦

Brodard, P./Bechelany, M./Philippe, L./Michler, J.

Synthesis and nanosoldering of silver nanowires on AFM cantilevers for tip-enhanced Raman spectroscopy (TERS), Annual Meeting Swiss Chemical Society, Fribourg, 09-16 ▼ ♦

Bucher, L./Mäder, X./Brodard, P./Christiansen, S./Michler, J.

Comparison of microscale measurement of residual stress in silicon using EBSD cross-correlation technique and confocal Raman microscopy, Annual Fall Meeting Swiss Chemical Society, Zürich, 09-16 ▼

Elias, J./Lévy-Clément, C./Bechelany, M./Michler, J./Philippe, L.

Well ordered Hollow Urchin-like ZnO by Electrodeposition, 218th ECS Meeting, Las Vegas, US, 10-10 thru 15 ♦

ZnO nanostructures from 1D to 3D obtained by Electrodeposition for photovoltaic applications,

61st Annual Meeting of the International Society of Electrochemistry, Nice, FR, 09-26 thru 10-01 ♦

Elias, J./Lévy-Clément, C./Bechelany, M./Michler, J./Wang, Z./Wang, G./Philippe, L.

Ordered Hollow Urchin-like ZnO nanostructures by Electrodeposition for photovoltaic applications, International Conference on Functional Nanocoatings, Dresden, DE, 03-28 thru 31 ♦

and 3rd International Conference on Advanced Nano Materials, Agadir, MA, 09-12 thru 15 ♦

Gabureac, M.

Tailoring the Cobalt:Carbon content by Focused Electron Beam controlled exposure, Micro & Nano Engineering (MNE) 2010, Geona, IT, 10-19 thru 22 ♦

Gabureac, M./Bernau, L./Boero, G./Utke, I.

Electron Microscope integrated single paramagnetic bead detection with nanocomposite Co-C Hall bio-nanosensors, Micro & Nano Engineering (MNE) 2010, Genoa, IT, 10-19 thru 22 ▼

Ghisleni, R./Ehrler, B./Raghavan, R./P'ng, K./Bushby, A./Michler, J.

Yield strength, deformation, and fracture of coherently strained InGaAs superlattice by in-situ micropillar compression, International Conference on Metallic Coatings and Thin Films, San Diego, US, 04-26 thru 30 ♦

Guinard, M.

Analyse et optimisation d'électrodépôts de Nickel produits à basses densités de courant, Technischen Fachtagung 2010, Innovation in des Galvanotechnik, Solothurn, 05-19 ♦

Correlating electrodeposited Ni structure with residual stresses

and mechanical properties, International Conference on Functional Nanocoatings, Dresden, DE, 03-30 ♦

Kombaiah, B./Ghisleni, R./Niederberger, C./Nowag, K./Michler, J.

Effect of Crystal Orientation on the Active Slip Systems of BCC Titanium Alloy; MRS Fall Meeting, Boston, US, 11-28 thru 12-03 ♦

Mäder, R./Ghisleni, R./Michler, J.

Plastic deformation of quartz at room temperature by SEM in situ micropillar compression, AGU Fall Meeting, San Francisco, US, 12-16 ▼

Mäder, X./Ghisleni, R./Mook, W./Östlund, F./Niederberger, Chr./Michler, J.

Tests micromécanique sur semi-conducteurs et métaux: Changement surprise de mécanisme de déformation à l'échelle sub-microscopique, Function Follows Materials Workshop, Neuchâtel, 11-18 ♦ ♦

Mäder, X./Niederberger, Chr./Christiansen, S./Bochmann, A./Andrä, G./Gawlik, A./Falk, F./Michler, J.

Intergranular microstructure and residual stress investigation by EBSD on laser-crystallized polycrystalline Si thin films on glass substrates for photovoltaic applications, ICMCTF International Conference on Metallurgical Coatings & Thin Films, San Diego, US, 04-29 ♦

Michler J.

EDS 2010 (Extended defects in Semiconductors), Brighton, UK, 09-19 thru 24 ♦ ♦

in-situ SEM nanomechanical testing, Plasticité 2010,

Toulouse, FR, 03-8 thru 9 ♦ ♦

Mechanical properties of nanowires, TMS 2010

(The annual meeting of the Minerals, Metals & Materials Society), Seattle, US, 02-14 thru 20 ♦ ♦

MRS Fall Meeting: In-situ SEM nanomechanics,

Boston, US, 11-28 thru 12-03 ♦ ♦

Niederberger, Chr.

In-situ orientation, strain and stress measurements by EBSD during compression experiments on micron-sized GaAs pillars, EBSD 2010 – Electron Backscatter Diffraction Meeting, Derby, UK, 03-29 thru 30 ♦

Pathak, S.

MRS Fall Meeting: On the Sequence of Events during Pop-ins in Spherical Nanoindentation, Boston, US, 11-28 thru 12-03 ♦

Pathak, S./Kalidindi, S. R./Doherty, R./Vachhani, J./Michler, J./Wasmer, K.

Investigations of Local Structure-Property Relations at Grain Boundaries Using Spherical Nanoindentation and Orientation Imaging Microscopy, Materials Science & Technology (MS&T) Conference, Pittsburgh, US, 10-25 thru 29 ♦ ♦

Philippe, L./Wang, Z./Peyrot, I./Hassel, A. W./Michler, J.

Nanomechanics of Rhenium wires: elastic modulus, yield strength and strain hardening, International Conference on Functional Nanocoatings, Dresden, DE, 03-28 thru 31 ♦

Raghavan, R.

Effect of ion irradiation on the mechanical behavior of a Zr-based bulk metallic glass, ISMANAM 2010, Zürich, 07-04- thru 09 ♦

Size effects in diverse structural states of a Zr-based bulk metallic glass, Camtec II, Cambridge, UK, 03-29 thru 30 ♦ ♦

Schamel, M./Zhang, D./Elias, J./Philippe, L./Michler, J./Spolenak, R./Richter, G.
In-situ SEM tensile and bending properties of metallic nanowires, Gordon Conference, Thin Film and Small Scale Mechanical Behavior, Waterville, Maine, US, 06-25 thru 07-03 ▼

Utke, I.
Is Pure Always Best?, International FEBIP 2010 Conference (Plenary Talk), Albany, US, 07-14 thru 16 ♦ ♦

Selective molecule depletion as concept to control the Cobalt: Carbon ratio in planar electron-impact deposits obtained from Co₂(CO)₈ in high-vacuum conditions, ECCL 2010 Conference, Sterdyn, PL, 08-23 thru 27 ♦ ♦

Utke, I./Hoffmann, P./Michler, J.
3D CVD with focused electron (ion) beams: Applications and Mechanical Testing, Micronarc Meeting 2010, Villars-sur-Ollon, 01-20 thru 22 ♦ ♦

Utke, I./Michler, J.
Gas Injection System for FEB/FIB Nanosynthesis and Etching, Int. Workshop On Analytical Focused Ion Beam and Scanning Electron Microscopy, Brno, CZ, 09-09 thru 10 ♦ ♦

Utke, I./Östlund, F./Michler, J.
Bringing ToF Mass Spectrometry, Chemistry, Mechanics, and Electronics into FIB/FEB Microscopes, FIB workshop 2010, Wien, AT, 08-28 thru 29 ♦

Nanoscale Materials Science

Bauert, T
Spring Meeting of the German Physical Societ (Building 2D crystals from fivefold symmetric molecules), Regensburg, DE, 03-22 ♦

Swiss Chemical Society, Fall Meeting (Fivefold symmetric molecules at metal surfaces), Zürich, 09-16 ▼

Bauert, T./Merz, L./Zoppi, L./Parschau, M./Baldridge, K. K./Siegel, J. S./Ernst, K.-H.
Buckybowls at surfaces: tiling and tilting, 3S'10, St. Christoph, AT, 03-10 ▼

Castaldi, L.
High oxidation resistance and phase stability of Cr-Si-O-N coatings, ICMCTF 2010, San Diego, CA, US, 04-26 thru 30 ♦

Crockett, R.
Adsorption and lubrication with glycoproteins, FANAS, Saarbrücken, DE, 10-25 ♦ ♦

Lubrication with Glycans, JAST, Fukui, JP, 09-13 ♦ ♦

The role of water in aqueous based lubrication with glycoproteins and polysaccharides. AsiaTrib, Perth, AU, 12-06 ♦

Ernst, K.-H.
Amplification of chirality in 2D, Systems Chemistry, COST-WG4 meeting, Taormina, IT, 04-24 ♦ ♦

Molecular chirality and surfaces: 2D enantiomorphism and inelastic electron tunnelling action spectroscopy, Physikalische Kolloquium, Karl-Franzens Universität, AT, 10-05 ♦ ♦

Single molecule surface dynamics: inelastic electron tunneling action spectroscopy with the STM, Condensed Matter Physics Seminar, University of Basel, 05-17 ♦ ♦

Symmetry aspects in two-dimensional crystals: Enantiomorphism, tiling, and phase transitions. Intern. Workshop Nanomaterials and Nanodevices, Guizhou University, Guiyang, CN, 07-03 ♦ ♦

Symmetry aspects in two-dimensional crystals: enantiomorphism, tiling and phase transitions, Chemistry Department Seminar, Katholieke Universiteit Leuven, NL, 02-23 ♦ ♦

Tickling single molecules with electrons: Inelastic tunneling action spectroscopy, International Workshop on Nanomaterials and Nanodevices, Chinese Academy of Sciences, CN, 07-01 ♦ ♦

Tickling single molecules with electrons: Manipulation with the STM, in situ characterization of near surface processes, Eisenerz, Styria, AT, 06-03 ♦ ♦

Towards control of polymorphism and enantiomorphism in 2D crystals, Solvias AG, Basel, 04-15 ♦ ♦

Hauert, R.
Biomedical applications of DLC coatings, European Conference on nano films, Liège, BE, 03-23 ♦ ♦

Diamond-like carbon (DLC) coatings/ European Postgraduate Training on Nanofilms, Module V, Biocompatible wear resistant and bioactive coatings, Technion, Haifa, IL, 05-03 ♦ ♦

ICMCTF 2010 Intern. Conference, San Diego, Organization Module D2, Diamond And Diamond-Like Carbon Materials, San Diego, US, 04-26 thru 30 ♦

Retrospective lifetime prediction of failed and explanted DLC coated hip joint balls MEET THE EXPERT, Material- und Oberflächentechnologie für Implantate, Interlaken, 05-20 thru 21 ♦

State of the art and failure mechanisms of DLC coated articulating joint replacement, BIO-COAT Conference, Zaragoza, ES, 06-24 ♦

♦ and 18th International Vacuum Congress (IVC-18), Beijing, CN, 08-23 thru 27 ♦ ♦

Hug, H. J.
Evolution of ferromagnetic Domains over a Distribution of Uncompensated Antiferromagnetic Spins, ICSM2010, Antalya, TR, 04-26 thru 30 ♦

Exchange Bias Effect: Observation of pinned uncompensated spins. Enhancement of the EB Effect, NIST, Gaithersburg, Washington, DC, US, 01-25 ♦ ♦

Mapping pinned uncompensated spins in exchange-biased systems by quantitative magnetic force microscopy, 55th MMM 2010, Atlanta, US, 11-14 thru 18 ♦

Exchange Bias Enhancement by Cr Addition to CoO in a CoO-Co/Pt Multilayer System, 11. Joint MMM 2010-Intermag, Washington, DC, US, 01-18 thru 22 ♦

Quantitative Magnetic Force Microscopy, ICNM-2010, Istanbul, TR, 09-28 thru 10-02 ♦

Jaeger, D.

Determination of Polarization of Metal Nitride Interfaces using AR-XPS, PSE 2010, Garmisch-Partenkirchen, DE, 09-12 thru 17 ♦

Interface investigations of TiN with Si₃N₄, Si and Ti overlayers using AR-XPS, MMM (Multiscale Materials Modeling) 2010, Freiburg, DE, 10-4 thru 8 ♦

Joshi, N./Hug, H. J.

How to map Pinned Uncompensated Spins in Exchange Biased Systems by MFM, MML2010, Berkley CA, US, 09-19 thru 24 ▼

The Role of Frustration for the Enhancement of the Exchange Bias Effect, MML2010, Berkley CA, US, 09-19 thru 24 ▼

Marioni, M.

Evolution of ferromagnetic domains over a distribution of uncompensated antiferromagnetic spins, 11. Joint MMM 2010-Intermag, Washington, DC, US, 01-18 thru 23 ♦

and ICNM-2010, Istanbul, TR, 09-28 thru 10-02 ♦

Cr-addition to CoO in a CoO-Co/Pt multilayer system and enhancement of exchange bias, 55th MMM 2010, Atlanta, USA, Atlanta, US, 11-14 thru 18 ♦

Merz, L./Ernst, K.-H.

Unification of the matrix notation in molecular surface science, 5th molCHsurf Meeting, Bern, 06-10 ♦

Müller, U./Falub, C. V./Thorwarth, G./Thorwarth, K./Parlinska-Wojtan, M./Voisard, C./Tobler, M./Hauert, R. In vitro adhesion lifetime of DLC-coatings and XPS interface analysis PSE, International Conference on Plasma Surface Engineering, Garmisch-Partenkirchen, DE, 09- 13 thru 17 ▼

Norris, A.

The energy to move atoms, IVC18, Beijing, CN, 08-20 thru 25 ♦

Oezer, S./Hug, H. J.

Exchange bias enhancement by Cr addition to CoO in a CoO-Co Pt multilayer system, ICNM-2010, Istanbul, TR, 09-28 thru 10-02 ♦

and ICSM2010, Antalya, TR, 04 -26 thru 30 ♦

Parschau, M./Passerone, D./Rieder, K.-H./Hug, H.-J./Ernst, K.-H. Single molecule surface dynamics: Inelastic electron tunneling action spectroscopy, Bunsentagung 2010, Bielefeld, DE, 05-14 ♦

Patscheider, J.

Al-Si-N-O hard coatings prepared by reactive magnetron sputter deposition from composite targets, 57th AVS Symposium, Albuquerque, NM, US, 10-17 thru 22 ♦♦

Carbide-based Nanocomposite Films – Structures and Properties, 1st Austrian Symposium on Carbon Coatings, Leoben, AT, 04-19 thru 20 ♦♦

Chemical states in Al-Si-N nanocomposite thin films as evidenced by XPS and other techniques, ICMCTF 2010, San Diego, C, US, 04-26 thru 30 ♦♦

Hard Nanocomposite Coatings: Improved properties of grain-boundary dominated materials, National Institute for Materials Science (NIMS), Tsukuba, JP, 03-10 ♦♦

Preparation and characterization of Al-Si-N hard coatings, PSE 2010, Garmisch-Partenkirchen, DE, 09-12 thru 17 ♦♦

The Thin Film System Al-Si-N – Solid Solutions, Nanocomposites and Nanomultilayers, ISPlasma, Nagoya, JP, 03-07 thru 10 ♦♦

Roth, Chr.

Single enantiomorphism and chiral conflict in 2D crystals, MolCHsurf, Bern, 06-10 ♦

and Spring Meeting of the German Physical Society, Regensburg, DE, 03-22 ♦

and ECOSS 27, Groningen, NL, 08-29 ♦

and Swiss Chemical Society, Fall Meeting, Zürich, 09-16 ▼

Vibrational spectroscopy of the system malic acid/Cu(110), CCMX Annual Meeting, Bern, 04-28 ▼♦

Thorwarth, G./Thorwarth, K./Falub, C. V./Müller, U./Affolter, Ch./Stiefel, M./Weisse, B./Voisard, C./Tobler, M./Hauert, R. Failure Analysis of DLC Coatings on Metallic Joint Implants.

and Failure mechanisms of DLC coated joint replacement, PSE, International Conference on Plasma Surface Engineering, Garmisch-Partenkirchen, DE, 09- 13 thru 17 ♦

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nanotech@surfaces

Fasel, R.

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Bottom-up fabrication of graphene-related materials, Interdisciplinary Nanoscience Center (iNANO), Aarhus, DK, 04-23 ♦♦

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Gaspari, R./Pignedoli, C./Blankenburg, S./Passerone, D. Understanding tip size effects in STM imaging, Ecss27, Groningen, NL, 08-29 thru 09-03 ♦

Gröning, O.

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and Seminar, Luzern, 10-18 ♦♦

Gröning, O./Buchs, G./Jafaar, R./Ruffieux, P./Bercieux, D./Krashenninnikov, A.
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Mäder, R.
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Passerone, D.
[Bottom-up design of molecular nanostructures: modeling helps experiment](#), Physical Chemistry Institute Seminar, Zürich, 11-11 ♦ ♦

[Coexistence of insulating and metallic states at the surface of 1T-TaSe₂: theory and experiment](#), European Conference Of Surface Science (ECOSS 27), Groningen, NL, 08-30 ♦ ♦

Pignedoli, C.
[Dehydrogenation of cyclohexaphenylene on Cu\(111\): possible reaction pathways from ab initio simulations](#), MolCHsurf V, Bern, 06-10 ♦ ♦

Ruffieux, P.
[Atomically precise bottom-up fabrication of graphene nanoribbons](#), Review meeting of the NCCR Nano, Basel, 04-27 ♦

and ECOSS 27, Groningen, NL, 08-29 thru 09-03 ♦

[Synthesis of Graphene Nanoribbons](#), Symposium on Surface Science (3S'10), St. Christoph, AT, 03-07 thru 13 ♦

Widmer, R.
[Scanning Tunneling Microscopy and Spectroscopy on PdGa\(111\)](#), 10th Palladium Day, Fritz-Haber-Institut der Max Planck Gesellschaft, Berlin, DE, 05-17 thru 19 ♦

[Colloquium: Surface and Electronic Structure of Complex Metallic Alloys](#), Max Planck Gesellschaft, Dresden, DE, 10-13 thru 16 ♦ ♦

[Investigations of the intermetallic PdGa\(111\) Surfaces](#), FHI Seminar, Fritz-Haber-Institut der Max Planck Gesellschaft, Berlin, DE, 11-24 ♦ ♦

[Structural and Mechanical Properties of Quasicrystalline Hard Coatings](#), European appliCMA Meeting, Turin, IT, 12-02

[Colloquium: Surface Science Investigations on intermetallic PdGa catalysts](#), Otto-von-Guericke Universität Magdeburg, DE, 12-10 ♦ ♦

[Comparison of the \(111\) and the \(-1-1-1\) PdGa Surfaces](#), 11th Palladium Day, Griesalp, 09-12 thru 14 ♦ ♦

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Thin Films and Photovoltaics

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[Comparison of CIGS solar cells grown on stainless steel foils with and without impurity diffusion barrier layers](#), 25th EPSE Conf.

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Blösch, P./Güttler, D./Chirilă, A./Tiwari, A. N.
[Optimization of Ti/TiN/Mo back contact properties for Cu\(In,Ga\)Se₂ solar cells on polyimide foils](#), E-MRS Spring meeting 2010, Strasbourg, FR, 06-7 thru 11 ♦

Buecheler, S./Perrenoud, J./Tiwari, A. N.
[Flexible CdTe Solar Cells and Modules: Recent Progress](#), Quantsol 2010, Brigels, 03-7 thru 13 ♦ ♦

Buecheler, S./Pianezzi, F./Fella, C./Chirilă, A./Decock, K./Burgelman M./Tiwari, A. N.
[Interface formation between CuIn_{1-x}Ga_xSe₂ absorber and In₂S₃ buffer layer](#), E-MRS Spring meeting 2010, Strasbourg, FR, 06-7 thru 11 ▼

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[Optimization of Composition Grading in Cu\(In,Ga\)Se₂ for Flexible Solar Cells and Modules](#), 35th IEEE Photovoltaic Specialist Conference, Hawaii, US, 06-20 thru 25 ♦

Chirilă, A./Pachlatko, S./Seyrling, S./Pianezzi, F./Bloesch, P./Buecheler, S./Verma, R./Nishiwaki, S./Tiwari, A. N.
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Chirilă, A./Guettler, D./Bloesch, P./Uhl, A./Nishiwaki, S./Seyrling, S./Pianezzi, F./Romanyuk, Y. E./Ziltener, R./Brémaud, D./Bilger, G./Tiwari, A. N.
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[Influence of NaF Incorporation during Cu\(In,Ga\)Se₂ Growth on Microstructure and Photovoltaic Performance](#), E-MRS Spring meeting 2010, Strasbourg, FR, 06-7 thru 11 ▼

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[The use of ZnO:Al as TCO for CdS/CdTe solar cell](#), E-MRS Spring meeting 2010, Strasbourg, FR, 06-7 thru 11 ♦ ♦

Perrenoud, J./Kranz, L./Schaffner, B./Buecheler, S./Tiwari, A. N.
[Development of flexible and stable CdTe thin film Solar Cells](#), 8. Nationale Photovoltaic Tagung, Winterthur, 02-4 thru 5 ▼

Perrenoud, J./Schaffner, B./Kranz, L./Buecheler, S./Tiwari, A. N.
[Flexible CdTe thin film solar modules](#), Technical Conference Photovoltaic: Thin Film 2010, Aix-en-Provence, FR, 05-27 thru 28 ♦

Schaffner, B./Perrenoud, J./Buecheler, S./Tiwari, A. N.
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[Modification of the Three-stage Evaporation Process for CuIn_{1-x}Ga_xSe₂ Absorber deposition](#), E-MRS spring meeting 2010, Strasbourg, FR, 06-7 thru 11 ▼

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[Influence of Absorber Surface Modifications on the Performance of Cu\(In,Ga\)Se₂ Solar Cells](#), 25th EPSE Conf.

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Tiwari, A. N.
[A review on the current status and prospects of CdTe solar cells](#), Applied Materials, San Jose, US, 01-7 ♦ ♦

[CdTe solar cells and modules](#), 6th Photovoltaic Science Applications and Technology Conference, Southampton, UK, 03-23 thru 25 ♦ ♦

[Challenges and prospects of high efficiency flexible solar cells](#), 2nd Annual Thin Film Solar Summit Europe, Berlin, DE, 03-17 thru 18 ♦ ♦

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Meier, U.

19 Years of Field Experience with CFRP in Bridge Construction,
3rd ASIA Bridge Summit, Merisis Consulting, Shanghai, China,
09-08 ♦ ▼

Basics about Carbon Fiber Reinforced Polymers (CFRP) for Bridge
Engineers, BridgeTech 2010, IABSE, Shanghai, China, 11-30 ♦ ▼

Box Girders under Extreme Long-Time Static and Fatigue Loading,
5th Intern. Conf. on Fiber Reinforced Polymer (FRP) Composites in
Civil Engineering CICE 2010, Beijing, China, 09-28 ♦ ▼

Carbon Fiber Reinforced Polymers (CFRP) in Structural
Engineering, CFRP Conference, Chengdu, China, 09-24 ♦ ▼

CFRP Cables: An Enabling Technology for Very Long-Span
Bridges, BridgeTech 2010, IABSE, Shanghai, China, 09-01 ♦ ▼

Faserverbundwerkstoffe im Bauwesen,
9.Bautechnik Forum 2010, TU Chemnitz, Chemnitz, DE, 03-19 ♦ ▼

Long-Term Experience with the Application of Adhesively Bonded
C for Cables of Suspended Structures,
Indo-Swiss Bonding (ISB 2010), Majitar, Sikkim, India, 02-11 ♦ ▼

New Challenges in Rehabilitation of Structures,
Encontro Nacional de Conservação e Reabilitação de Estruturas –
REPAR 2010, Lisbon, Portugal, 06-23 ♦ ▼

Non-Finito, ACES Workshop: Innovative Materials and Techniques
in Concrete Construction, Corfu, Greece, 10-11

Research Needs for Carbon Fiber Reinforced Polymers (CFRP) and
Adaptive Material Systems in Structural Engineering,
Southwest Jiaotong University, Chengdu, China, 09-24 ♦ ▼

Trends in Practices and Technologies for Bridge Management:
European Bridge Owner Perspective, NDE-NDT for Highways and
Bridges: SMT 2010, New York, USA, 08-20 ♦ ▼

Verbund CFK-Aluminium für den Apparate- und Fahrzeugbau,
LEIBER-Symposium, Emmingen, DE, 03-04 ♦ ▼

Building Technologies

Allegrini, J./Dorer, V./Carmeliet, J.
Urban climate and energy demand in building,
Zürich, 09- 02 thru 03

Anderson, B. E./Ulrich, T. J./Le Bas, P.- Y./Griffa, M./Johnson, P. A.
Crack localization and characterization in solid media using time
reversal techniques, Salt Lake City, US, 06-27 thru 30 ♦

Bai, Y./Hugi, E./Ludwig, K./Keller, Th.
Fire performance of water-cooled cellular GFRP columns,
The 5th international conference on composites in civil engineering
CICE Beijing, China, Beijing, CN, 09-27 thru 29 ♦

Carmeliet, J./Guyer, R./Derome, D.
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approach, IV European Conference on Computational Mechanics,
Paris, Paris, FR, 05-16 thru 21 ♦

Carmeliet, J./Mertens, S./Moonen, P.
A multiscale approach for nonlinear hysteretic damage behaviour
of quasi-brittle disordered materials,
Euro-C 2010, Rohrmoos, Schlading, AT, 03-15 thru 18 ♦

Derluyn, H./Carmeliet, J.
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in porous limestone, CCMX Summer School Advanced
characterization techniques of materials, Lausanne, 08-25 thru 27 ♦

and Empa PhD Student's Symposium, Dübendorf, 10 ♦

Derluyn, H./Espinosa-Marzal, R. M./Moonen, P./Carmeliet, J.
Experimental and numerical study on sodium sulfate and chloride
crystallization in porous limestone, Cryspom II (Crystallization in
porous media), Brienz, 06-15 thru 18 ♦

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Mechanics, Paris, FR, 05-16 thru 21 ♦

Derome, D./Griffa, M./Carmeliet, J.
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COST Action FP 0802 workshop on «Wood structure, function
relationships », Hamburg, DE, 10-05 thru 08 ♦

Espinosa-Marzal, R. M./Heuberger, M./Carmeliet, J.
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Crystallization in porous media (Cryspom II),
Brienz, 06-15 thru 18 ♦ ♦

Gaegauf, Ch./Sattler, M./Dorer, V. et al.
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«Forschen und Bauen im Kontext von Energie und Umwelt »,
Zürich, 09- 02 thru 03

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friction and stick-slip dynamics and the investigation of dynamic
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Assembly 2010, Wien, AT, 05-02 thru 07 ▼

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Carmeliet, J.
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triggering: investigation by Discrete Element Method numerical
simulations, Southern California Earthquake Center 2010 Annual
Meeting, Palm Springs, US, 09-11 thru 15 ▼

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by Discrete Element Method modeling and simulation», XV
International Conference on Nonlinear Elasticity in Materials,
Otranto, IT, 07-04 thru 11 ♦

Gwerder, M./Gyalistras, D./Oldewurtel, F./Lehmann, B./Stauch, V./
Tödtli, J.
Potential Assessment of Rule-Based Control for Integrated Room
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TR, 05-09 thru 12 ♦

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Gyalistras, G./Gwerder, M./Oldewurtel, F./Jones, C./Morari, M./Lehmann, B./Wirth, K./Stauch, V.

Analysis of energy savings potentials for Integrated Room Automation, Clima 2010, 10th REHVA World Congress, Antalya, TR, 05-09 thru 12 ♦

Johnson, P. A./Marone, C./Knuth, M./Kaproth, B./Carpenter, B./Behringer, R./Guyer, R. A./Le Bas, P. -Y./Griffa, M./Carmeliet, J. Effects of Acoustic Waves on Stick-Slip Behavior in Sheared Granular Media With Implications to Dynamic Earthquake Triggering and Slow Slip, European Geosciences Union General Assembly 2010, Vienna, Wien, AT, 05-02 thru 07 ♦

Koebel, M.

Matériaux sol-gel pour la réduction d'usage d'énergie dans le bâtiment, Tours, FR, 02-01 thru 03 ♦

and Môret sur Loins, FR, 09-05 ♦

Macchi, S.

Convegno «Vecchia, nuova ma in ogni caso ecologica», Empa-SUPSI, Convegno TI, 03-29 ♦ ♦

Moonen, P./Carmeliet, J.

Multiscale modeling of transport in damaged porous media, Transpore 2010, Villigen, 08-19 thru 20 ♦ ♦

Oldewurtel, F./Gyalistras, D./Gwerder, M./Jones, C./Parisio, A./Stauch, V./Lehmann, B./Morari, M.

Increasing Energy Efficiency in Building Climate Control using Weather Forecasts and Model Predictive Control, Clima 2010, 10th REHVA World Congress, Antalya, TR, 05-09 thru 12 ♦

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Saneinejad, S./Moonen, P./Defraeye, T./Carmeliet, J.

Analysis of convective heat and mass transfer at the vertical walls of a street canyon: drying behavior after a rain event, CWE2010, Chapel Hill, US, 05-23 thru 27 ♦

Weber, R.

Heat storage with sodium hydroxide, Eurosun, Graz, AT, 09-29 thru 10-01 ♦

Weber, R.

Langzeit Wärmespeicherung mit NaOH, 2. Aktiv-Solarhaustagung, Luzern, 09-22 thru 23 ♦

Zimmermann, M.

Energy Efficient Technologies for Government Buildings – New and Retrofits, Orlando, US, 01-21 thru 23 ♦ ♦

Innovation at home / Climate Forum, Thun ♦ ♦

Raumzelle SELF: Prototypen für das Bauen in der Zukunft, Swissbau, Basel, 01-12 ♦ ♦

Retrofit Advisor: Ein Werkzeug für strategische Entscheidungen in der Bauerneuerung, Symposium «Holzbaulösungen für die Gebäudemodernisierung», München, DE, 04-27 ♦ ♦

Self, das unabhängige Haus, Jahrestagung der Schweiz.

Physikalischen Gesellschaft, Uni Basel, Basel, 06-22 thru 25 ♦ ♦

Sustainable Construction: Overview of Swiss Approaches,

Estonian-Swiss Contact Seminar, Tallinn, EE, 02-05 ♦ ♦

Center for Synergetic Structures

Galliot, C./Luchsinger, R.

Biaxial testing of architectural membranes and foils, Tensinet Symposium 2010, Sofia, BG, 09-15 thru 17 ♦

Luchsinger, R.

Weight matters: Tensairity kites, Airborne Wind Energy Conference 2010, Stanford, Palo Alto, US, 09-28 thru 29 ♦

Innovation is in the air,

Int. Fachtagung Bionik, Chemnitz, DE, 11-23 ♦ ♦

Use the air: Inflated structures and Tensairity,

Lodz Design Festival 2010, Lodz, PL, 10-15 ♦ ♦

Use the air: The new light weight structure Tensairity,

UC Berkely, US, 09-30 ♦ ♦

Luchsinger, R. et al.

Straight and curved: Recent developments with Tensairity, Tensinet Symposium 2010, Sofia, BG, 09-15 thru 17 ♦

Luchsinger, R./Bräker, M.

A novel pneumatic actuator with Tensairity, Design and Nature 2010, University of Pisa, IT, 06-28 thru 30 ♦

Rampf, M. et al.

Bioinspired engineering of self-repairing pneumatic membranes, Materials Science and Engineering Congress 2010, Darmstadt, DE, 08-24 thru 26 ♦

Bioinspired self-repairing membranes: physical and engineering

aspects, COST Strategic Workshop Bio-Inspired Materials, Wien, AT, 04-13 thru 15 ▼

Concrete / Construction Chemistry

Ben-Haha, M./Lothenbach, B./Winnefeld, F.

[Thermodynamic modelling of the hydration of alkali-activated slag using different MgO content.](#), Symposium on Concrete Modelling (CONMOD 2010), Lausanne, 06- 22 thru 25 ♦

Bullard, J. W./Lothenbach, B./Stutzman, P. E./Snyder, K. A.

[Using thermodynamics to simulate cement paste microstructure development.](#), Symposium on Concrete Modelling (CONMOD 2010), Lausanne, 06- 22 thru 25 ♦

Bullard, J./Stutzman, P./Snyder, K./Lothenbach, B.

[Microstructure and thermodynamics](#), 3rd GEMS Workshop. Empa Akademie, Dübendorf, 06-28 thru 29 ♦

Castro, J./Lura, P./Rajabipour, F./Henkensiefken, R./Weiss, J.

[Internal curing: discussion of the role of pore solution on relative humidity measurements and desorption of lightweight aggregate \(LWA\).](#) SP-270 Advances in the Material Science of Concrete, ACI Spring convention 2010, Chicago, US, 03-21 thru 25 ♦

De Weerd, K./Kjellsen, K./Justness, H./Lothenbach, B.

[Ternary cements containing limestone powder and fly ash](#), 3rd GEMS Workshop. Empa Akademie, Dübendorf, 06-28 thru 29 ♦

Deschner, F./Winnefeld, F./Lothenbach, B./Dittrich, S./

Goetz-Neunhoeffer, F./Neubauer, J. [Reactivity of low calcium fly ash in blended Portland cements](#), Tagung Bauchemie (GDCh-Fachtagung), Dortmund, DE, 10-07 thru 08 ♦

Dilnesa, B. Z./Lothenbach, B./Lesaut, G./Winnefeld, F.

[Seminar on Layered Double Hydroxides, Aft and Aft phases](#), PSI, Villigen, 10-25 ♦

Dilnesa, B. Z./Lothenbach, B./Wieland, E./Dähn, R./Wichser, A./

Scrivener, K. L. [Preliminary investigation on the fate of iron during cement hydration.](#), Symposium on Concrete Modelling (CONMOD 2010), Lausanne, 06- 22 thru 25 ♦

Ferrari, L. M./Kaufmann, J. P./Winnefeld, F.

[Effect of superplasticizers on cement model systems](#), 1st Swiss Soft Days workshop, 02-04 ▼

[Multi-method approach to characterize superplasticizer behavior at the solid-liquid interface](#), 3rd Swiss Soft Days workshop, 10-20 ♦

Ferrari, L./Ben Haha, M./Kaufmann, J. P./Winnefeld, F.

[AFM force measurement on clinker surfaces and model systems in aqueous solutions containing superplasticizer.](#) 32nd Intern. Conf. on Cement Microscopy, New Orleans, US, 03-28 thru 31 ♦

[Interaction of superplasticizer with cement suspensions](#),

2nd Swiss Soft Days workshop, 06-23 ▼

Idiart, A./Lothenbach, B./Capra, B.

[Computational modeling of external sulfate attack in mortars.](#), Symposium on Concrete Modelling (CONMOD 2010), Lausanne, 06- 22 thru 25 ♦

Idiart, A./Lothenbach, B./Kosakowski, G./Shao, H.

[Reactive transport modeling of sulfate ingress solutions](#), 3rd GEMS Workshop. Empa Akademie, Dübendorf, 06-28 thru 29 ♦

Kunther, W.

[Sulfate ingress: modelling of different sulfate solutions](#), 3rd GEMS Workshop. Empa Akademie, Dübendorf, 06-28 thru 29 ♦

Kunther, W./Lothenbach, B./Scrivener, K.

[Thermodynamic modeling of cements in different sulfate environments.](#), Symposium on Concrete Modelling (CONMOD 2010), Lausanne, 06- 22 thru 25 ♦

[Experimental Determination of Oxide Profiles in a Cementitious Matrix with EDX](#),

Transport in Porous Materials, PSI, Villigen, 08-19 ▼

Leemann, A.

[AAR – neuste wissenschaftliche Erkenntnisse](#), Fachtagung «Betonerosion in Biologiebecken von Abwasserreinigungsanlagen», 06-14 ♦

[Frühschwinden und Rissbildung](#),

10. Holcim Cement & Concrete Colloquium, 11-19 ♦

[Trocknungsschwinden und autogenes Schwinden](#),

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[Ursachen der Betonerosion – neueste Erkenntnisse](#),

Fachtagung «Betonerosion in Biologiebecken von Abwasserreinigungsanlagen», 06-07 ♦

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Lothenbach, B.

[C-A-S-H experiments](#), LCS Partner Meeting, London, GB, 12-09 thru 10 ♦

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3rd GEMS Workshop Empa Akademie, Dübendorf, 06-28 thru 29 ♦ ♦

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Sant, G./Lura, P./Weiss, J./Scrivener, K.

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Thermodynamic modelling of calcium sulfoaluminate cements,

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Affolter, C./Hauert, R./Falub, C. V./Thorwarth, G./Stiefel, C./Thorwarth, K./Müller, U./Podleska, L. E./Taeger, G.

Retrospective lifetime estimation of failed and explanted DLC coated hip joint balls,

European Cells & Materials, Interlaken, 05-20 thru 21 ♦

Affolter, C./Hufenus, R./Camenzind, M. A./Halbeisen, M./Spierings, A. B./Tischhauser, A./Hogg, K./Schramm, G.

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Brunner, A. J./Stelzer, S./Pinter, G.

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Kunststoffen, 34. Sitzung Fachgruppe Strukturintegrität des SVMT, Winterthur (CH), Winterthur, 05-05 ♦ ♦

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Brunner, A. J./Tannert, T./Vallée, T.

Acoustic emission monitoring of tensile tests on welded wood-joints, 29th European Conference on Acoustic Emission Testing, Wien, AT, 09-08 thru 10 ♦

Dürager, C./Brunner, A. J.

Wireless electro-mechanical impedance monitoring system for aircraft landing gears, Fifth European Workshop on Structural Health Monitoring, Sorrento, IT, 06-28 thru 07-04 ♦

Jordi, C./Michel, S./Dürager, C./Bormann, A./Gebhardt, C./Kovacs, G.

Large planar dielectric elastomer actuators for fish-like propulsion of an airship,

SPIE Conference 2010, San Diego, US, 03-07 thru 11 ♦ ♦

Koller, R.

DGM-Seminar «Systematische Beurteilung technischer Schadenfälle, Ermatingen, 03-25 ♦

Meier, U./Müller, R./Barbezat, M./Terrasi, G. P.

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Campanile, F.
The circle-arc procedure for non linear bending, Università Pavia, Pavia, IT, 02-05 ♦♦

La natura come maestro (Die Natur als Lehrmeister), Kantonsschule, Locarno, 03-04 ♦♦

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Component assessment data requirements for creep-fatigue tests, ASTM-E08 Conference, San Antonio, US, 10-15 thru 19 ♦

Creep-Fatigue in Steam Turbine Materials, 6th International Conference on Advances in Materials Technology for Fossil Power Plants, Santa Fe, New Mexico, USA, 08-31 thru 09-03 ♦♦

Creep-Fatigue Interaction in Power Plant Steels, HIDA 5 2010, London, GB, 06-23 thru 25 ♦♦

Defect Integrity in Components subjected to Cyclic Loading at High Temperatures, Baltica VIII 2010, Helsinki, FI, 05-18 thru 20 ♦

Effect of prior cyclic damage removal on high temperature low cycle fatigue endurance, 10th International Fatigue Congress, Prague, CZ, 06-06 thru 11 ♦

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Service-Cycle Component-Feature Specimen TMF Testing of Steam Turbine Rotor Steels, 9th Liège Conference on Materials for Advanced Power Engineering, Liège, BE, 09-27 thru 29 ♦♦

Mayer, Th.
Neutron diffraction examination of dislocation density evolution in a bainitic steel after low-cycle fatigue test at elevated temperature, 8th European Conference on Residual Stress (ECRS8), Trento, IT, 06-25 thru 28 ▼

Mazza, E.
Mechanical characterization of soft organs for medical applications, Institut für Anatomie, Universität Zürich, Irchel, 11-29 ♦♦

Service-like thermomechanical fatigue experiments for the validation of lifetime assessment procedures, CCMX, Empa Akademie, 10-20 ♦♦

Mechanische Berechnung: nicht linear, oder?, Empa Akademie, 10-21 ♦♦

Pham-Minh, S./Mayer, Th.
The effect of sub-grain formation and development on cyclic response in engineering steels, 18th European Conference on Fracture, Dresden, DE, 08-30 thru 09-03 ♦

Schmidt, A.
Mechanical modeling of Interpenetrating Polymer Network reinforced acrylic elastomer, SPIE, San Diego, US, 03-07 thru 11 ♦

Thwagiah, G./Campanile, L. F.
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3-D and 2.5-D for the inspection of traffic infrastructure, Workshop New approaches for efficient and cost-effective 3D GPR investigation, GPR 2010, 13 Int. Conf. On GPR, Lecce, IT, 06-21 ♦♦

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Einstürzende Sporthallen und Georadar für zerstörungsfreie Prüfung, Jahrestagung der Deutschen Gesellschaft für zerstörungsfreie Prüfung (DGZfP), Erfurt, DE, 05-10 ♦♦

Partl, M. N.
Der neue Mobile Load Simulator (MLS 10), Deutscher Straßen- und Verkehrskongress 2010, Mannheim, DE, 09-15 ♦♦

Lärmarme Beläge und Fugenlose Fahrbahnübergänge, Bau und Wissen: Lärmschutz bei Strassenbrücken, Wildegg, 06-23 ♦♦

Long term Pavement Performance Testing of Asphalt Pavements, RMPD Seminar, LNEC, Lisbon, PT, 03-24 ♦♦

Measuring the Environmental Footprint of Individual Vehicles, KEC Seminary, Gyeonggi-Do, KR, 06-02 ♦♦

and KTH, Stockholm, SE, 05-20 ♦♦

On the Road to Greener Asphalt Pavements (GAPs), 1st Int. Workshop on the Use of Marginal Materials in Road Construction, Padova, IT, 11-19 ♦♦

Report of the MLS User Group, 89th Annual Meeting of TRB, Technical Committee AFD40(2), Washington DC, US, 1-11 ♦♦

Road Research: Some Aspects from Empa Perspective, Workshop KTH – Väg-och-Ban, Tällberg, SE, 04-29 ♦

Swiss Experience with MLS10 and MMLS3 2009, 89th Annual Meeting of TRB, MLS User Group Workshop, Washington DC, US, 1-10 ♦♦

Thin Surfacing/International Sustainable Pavements Workshop, Warrenton/Washington DC, US, 1-8 ♦♦

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Mechanical Performance Testing of Low-Noise Bituminous Plug Expansion Joints for Concrete Road-Bridges, ATAP 2010 Advanced Technologies in Asphalt Pavements, Chuncheon, KR, 06-03 ♦♦

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Raab, C./Partl, M. N.
Temperature dependency of interlayer shear testing, Transport Research Arena Europe 2010, Brussels, BE, 06-09 ♦ ♦

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Czaderski, C./Motavalli, M.
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Feltrin, G./Bischoff, R./Meyer, J./Saukh, O.
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and In-node data processing in structural monitoring with wireless sensor networks. 5th Internat. Conference on Bridge Maintenance, S & M IABMAS 2010, US, 07-11 thru 07-15 ♦

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Temperatur- und Langzeitverhalten von Schwingungstilgern bei Fussgängerbrücken, 13. Symposium Bauwerksdynamik und Erschütterungs-messungen, Empa Akademie, 06-18 ♦

Ghafoori, E.
Fatigue Strengthening of Cracked Steel Beams with Pre-Stressed CFRP Plates, ASME 2010, Internat. Mec. Eng. Congress, Vancouver, CA, 11-12 - 11-18 ♦

Michels, J./Waldmann, D.
Design Model for SFRC Flat Slabs with Openings in the Column Area, 3rd fib International Congress 2010, Washington CD, US, 05-30 thru 06-02 ♦

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Wood

Arnold, M.
Klassierung und Beurteilung von beschichtetem Holz, 42. Fortbildungskurs der Schweiz. ARGE für Holzforschung SAH, Weinfelden, 10-26 thru 27 ▼

Planing and sanding of wood surfaces – Effects on properties and coating performance, 7th International Woodcoatings Congress, Amsterdam, NL, 10-12 thru 13 ▼

Brönniman, R./Widmann, R.
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Caermeliet, J./Guyer, R./Derome, D.
Moisture and mechanical hysteretic behavior of wood: a two-scale approach, IV European Conference on Computational Mechanics, Paris, FR, 05-16 thru 21 ▼

Derome, D./Griffa, M./Carmeliet, J.
3D swelling/shrinkage of spruce wood at cellular scale, Second meeting of COST FP0802, Hamburg, DE, 10-5 thru 8 ▼

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Analysis of the impact of cell geometry and swelling vapor permeability of wood, IV European Conference on Computational Mechanics, Paris, FR, 05-16 thru 21 ▼

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Entwicklung effizienter Verfahren zur maschinellen Festigkeitssortierung von Schnittholz, Doktorandenkolloquium Holzbau Forschung + Praxis, Uni Stuttgart, DE, 03-17 thru 18 ▼

Deublein, M./Steiger, R./Köhler, J.
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Eyholzer, C./Zimmermann, T./Oksman, K.
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Espoo, FI, 10-26 thru 30 ▼

Jockwer, R.
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21. Hanseatische Sanierungstage, Rostock – Warnemünde, DE, 11-
11 thru 13 ▼

Release of Conventional and Nano-Sized Biocides from Coated
Wooden Façades during Weathering, 53rd Intern. Con. of Soc. of
Wood Science and Technology, Geneva, 10-11 thru 15 ▼

Lehringer, Ch.
42. Fortbildungskurs der Schweizerischen Arbeitsgemeinschaft für
Holzforschung SAH, Weinfelden, 10-26 thru 27

Magnier, L./Zmeureanu, R./Rimmer, J./Derome, D.
Experimental models for the determination of the Length of the
Adjacent Zone for Displacement Ventilation diffusers, Clima2010,
Antalya, TR, 05-9 thru 12 ▼

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A Micromechanical Approach to the Nonlinear Poroelastic
Behavior of Wood in a Multi-scale Framework, Second meeting of
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Richter, K.
Geklebte Bauholzprodukte – Umwelteigenschaften und
Positionierung im nachhaltigen Bauen,
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AT, 04-28 thru 29 ▼

Richter, K.
Plattenförmige Holzwerkstoffe: Einführung und Übersicht,
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Cellulose nanofibrils in polyurethane wood adhesives,
11th International Conference on Biocomposites: Transition to
Green Materials, University of Toronto, Toronto, CA, 05-02 thru 04
▼

Schubert, M.
Biocontrol of wood decay fungi in urban trees,
Strassburg, FR, 09-21 ▼

Schwarze, F.
Mechanisms of biological control, Manchester, UK, 09-13 ▼

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20 thru 24 ▼

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Synchrotron X-ray tomographic microscopy,
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Novel bionanocomposites from poly(lactic acid) and surface
functionalized microfibrillated cellulose,
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San Francisco, US, 03-21 thru 25 ▼

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Allocation to European strength classes and relevant grading
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Nanofibrillierte Cellulose in einem vielfältigen
Anwendungsspektrum – Steuerung der Papierstruktur und
Festigkeit durch nanoskalige Cellulosen, Nanotechnologisch
modifizierte Fasern, Papierseminar Papiertechnische Werke,
Dresden, DE, 10-5 thru 6 ♦ ♦

Advanced Fibers

Fortunato, G.

Odor degradation by modified PET fibers, Polyester, Polyamide and Intermediates Conference, Frankfurt, DE, 06-10 ♦ ♦

Gaan, S.

Flame Retardant PLA From Phosphoramidates, Fiber Society Spring Conference, Bursa, TR, 05-12 thru 14 ♦

Recent Developments of Flame Retardants for Fibers and Future Trends,

49th Man-Made Fibers Congress, Dornbirn, AT, 09-15 thru 17 ♦ ♦

Thermal Decomposition and flame retardancy of cellulose acetate in presence of bisphosphoramidates,

ACS, Cellulose Division, San Francisco, US, 03-22 thru 25 ♦

Gaan, S./Turalija, M.

Antimicrobial Polylactide, 5th ITC&DC 2010, Dubrovnik, CR, 10-03 thru 06 ♦ ♦

Guimond, S./Hanselmann, B./Hegemann, D.

Characterization and derivatization of a-C:H:N plasma polymers, 12th International Conference on Plasma Surface Engineering (PSE), Garmisch-Partenkirchen, DE, 09-15 ▼

Deposition of a-C:H:N plasma polymer thin films for the functionalization of textiles, 63rd Gaseous Electronics Conf.

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Halbeisen, M.

11. Textiltagung: Neue Rohstoffe für Textilien, Empa Akademie, Dübendorf, 10-28 ♦

Nanotechnologie: Eine Zukunftstechnologie mit Visionen, Thuner Service Club, Thun, 03-17 ♦ ♦

Verkeimung in der Wasserversorgung – Wo und wie kann die Nanotechnologie ansetzen?,

Nano-Cluster Bodensee, St. Gallen, 06-28 ♦ ♦

Wie die Nanotechnologie unsere Kleider perfektioniert Nanotechnologie unsere Kleider perfektioniert,

TecDay Kantonsschule, Heerbrugg, 05-04 ♦

Wie viel Nanotechnologie steckt in meinem Pullover?, LifeLive, Romainmôtier, 06-13 ♦ ♦

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Control of Gas Phase and Surface Processes in Plasma Polymerization, 63rd Gaseous Electronics Conference (GEC), Paris, FR, 10-05 ▼

Influence of Gas Phase and Surface Reactions on Plasma Polymerization, Plasma Surface Engineering (PSE) 2010, Garmisch-Partenkirchen, DE, 09-13 ♦

Multi-functional bactericidal textiles,

Man Made Fiber Congress (MFC), Dornbirn, AT, 09-16 ♦ ♦

Nanostructured Plasma Coatings for Medical Applications, ESF Exploratory Workshop on Manipulation of Biomaterials Surface by Plasma Processing, Iasi, Rumänien, RO, 05-27 ♦ ♦

Nanostructured Surface Functionalization of Textiles Using Plasma Technology,

4th Int. Technical Textiles Congress, Istanbul, TR, 05-17 ♦ ♦

Plasma Chemical and Physical Influences on the Deposition of Functional Coatings,

Seminar at Charles University Prague, Prag, CZ, 01-05 ♦ ♦

Hegemann, D./Guimond, S. G.

Potential der Atmosphärenplasmen im Vergleich zu Niederdruckverfahren, 7. Workshop Anwenderkreis Atmosphärendruckplasma, Würzburg, DE, 02-12 ♦ ♦

Hegemann, D./Körner, E.

Bio-active plasma nanocomposite coatings through controlled silver release, Materials Science and Engineering (MSE) 2010, Darmstadt, DE, 08-24 ♦

Heuberger, M.

Nanoscale Silver Coatings on Polymer Fibers, NSTI-Nanotech 2010, Anaheim, USA, US, 06-21 ♦

Observation of dynamic and structural transitions in molecular confined films,

Ecole de Cargèse 2010, Cargèse, Corse, FR, 03-22 thru 26 ♦ ♦

Heuberger, M./i.V. Blatter, P. (METAS)

High accuracy calibration of optical spectrometers (HICALOS), CIE Tutorial and Expert Symposium on Spectral and Imaging Methods for Photometry and Radiometry, Bern, 08-31 ♦

Hufenus, R.

Analysis of the microstructure of bicomponent fibers by wide-angle X-ray diffraction (WAXD), Fiber Society Fall Conference, Snowbird, Utah, US, 10-20 thru 22 ♦

Bicomponent artificial turf fibers for future sports flooring, Fiber Society Spring Conference, Bursa, TR, 05-12 thru 14 ♦

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International Izmir Textile & Apparel Symposium, Cesme, TR, 10-28 thru 30 ♦ ♦

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Poly Mat, Kerkrade, NL, 05-18 thru 19 ▼

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NATO ASI «Defense Related Intelligent Textiles & Clothing for
Ballistic and NBC Protection, Split, HR, 04-10 ♦ ♦

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Faist Emmenegger, M./Reinhard, J./Zah, R.

[Challenges of including LCA into legislations, standardization schemes for sustainable biofuels](#), LCA X, Portland, Oregon, US, 11-02 thru 04 ♦ ♦

[Extension of the SQCB For RED GHG Calculations](#), 18th European Biomass Conference and Exhibition, Lyon, FR, 05-03 thru 07 ♦

[Extension of the Sustainability Quick Check for Biofuels \(SQCB\) to a one-stop-shop tool for the RSB certification system](#), LCA X, Portland, Oregon, US, 11-02 thru 04 ▼

[Supporting certification schemes for biofuels with the Sustainability Quick Check for Biofuels \(SQCB\)](#), SETAC Europe 20th Annual Meeting, Sevilla, ES, 05-23 thru 27 ▼

[Sustainability Quick Check for Biofuels \(SQCB\): advantages and shortcomings of a streamlined LCA of biofuels](#), SETAC 16th LCA case studies, Poznan, PL, 02-01 thru 02 ♦

Gauch, M.

[Formen zukünftiger Mobilität und ihr Umwelteinfluss](#), Energiekongress Bluetech, Winterthur, 09-14 ♦ ♦

[Future Mobility – Environmental Impact Assessment of Electric Vehicles](#), Conference Electric Vehicles and Intelligent Battery Applications, Amsterdam, NL, 09-23 ♦ ♦

[Life Cycle Assessment \(LCA\) of Li-Ion batteries for electric vehicles](#), Conference Battery Testing for Electric Mobility, Berlin, DE, 05-06 ♦ ♦

[Contribution of Li-Ion Batteries to the Environmental Impact of Electric Vehicles](#), Conference Batteries 2010, Cannes, FR, 10-02 ♦ ♦

Gauch, M./Widmer, R.

[Nachhaltige Mobilität – Quo vadis Automobil?](#) Empa Akademie, Dübendorf, 10-27 ▼

Gottschalk, F./Nowack, B.

[Session on «Risk assessment of engineered nanomaterials»](#), Conference on Environmental Decisions, Ascona, 04-25 thru 29 ♦ ♦

Gottschalk, F./Nowack, B./Scholz, R./Reichert, P.

[Development of Exposure Scenarios for Manufactured Nanomaterials](#), NANEX -Workshop, Athen, GR, 10-21 thru 23 ♦

Gottschalk, F./Ort, Ch./Nowack, B.

[Engineered Nanoparticles in the environment Analysis, occurrence and impacts](#), NORMAN-Conference, Bundesanstalt für Gewässerkunde, Koblenz, DE, 10-19 thru 20 ♦

Hilty, L. M.

[An Introduction to the Relationship between ICT and Sustainable Development](#). Keynote Lecture, 9th Human Choice and Computers International Conference (HCC9) and the WCC 2010 Critical Infrastructure Protection Conference, Brisbane, AU, 09-20 ♦ ♦

[Die Wirkungen des Virtuellen auf das Reale: Umgang mit Ressourcen](#), Konferenz Herausforderung Internet heute und morgen, TA-Swiss, Bern, 04-17 ♦ ♦

[From Environmental Informatics to Sustainability Informatics?](#)

Keynote lecture, INTERGEO and 24th EnviroInfo 2010, Cologne, DE, 10-6 ♦ ♦

[Track 4 «ICT and Sustainable Development»](#), 9th Human Choice and Computers International Conference (HCC9), World Computer Congress 2010, Brisbane, AU, 09-20 thru 23 ♦

Hischier, R.

[EcoEditor Workshop](#), Ecole Polytechnique, Montréal, CA, 05-07 ♦ ♦

and ETH Zürich, 05-17/06-08 ♦ ♦

and Empa, Dübendorf, 06-17 ♦ ♦

Intro EcoEditor.

[and Life Cycle Inventory Modelling of Nano Materials](#), CYCLE 2010 Conference, Montréal, CA, 05-04 thru 05 ♦ ♦

[Ökobilanz und Nachhaltigkeit bei Verpackungen](#), Tag der Verpackung, Karthause Ittigen, 06-18 ♦ ♦

[Ökobilanzen als Element des Risikomanagements](#), KVS – Tag des Kunststoffs, Arbon, 07-02 ♦ ♦

[Requirements of EPI systems and their fulfilment by ecoinvent](#), Discussion Forum LCA «Environmental Product Information and LCA», Bern, 06-22 ♦

[Sustainability – Begriff & Anwendung im Verpackungsbereich](#), 17. Stuttgarter Verpackungstage, Gültstein, Herrenberg, DE, 09-21 ♦ ♦

Mueller, E./Widmer, R./Orthlieb, A.

[Material Flows, Energy Consumption and Environmental Impacts of the Service ‘Internet Switzerland’](#), Care Innovation, Wien, AT, 11-08 thru 11 ♦

Notter, D.

[Nachhaltige Mobilität – Quo vadis Automobil?](#) Empa Akademie, Dübendorf, 10-27 ▼

Nowack, B.

[Modelling of environmental fate of nanomaterials](#), Joint CASG-Nano and ENPRA Workshop on Early Harvest of Research Results on nanosafety, Ispra, IT, 04-14 thru 15 ♦ ♦

[Nano titanium dioxide: first steps toward an environmental risk assessment](#), CEPI Environment Committee Spring meeting, Dübendorf, 05-21 ♦ ♦

Nowack, B./Geranio, L./Heuberger, M.

Behavior of silver nano-textiles during washing,

2nd NanoImpactNet Conference, Lausanne, 03-09 thru 12 ♦

and SETAC Europe Annual Meeting, Seville, ES, 05-23 thru 27 ♦

Nowack, B./Gottschalk, F./Sonderer, T./Scholz, R.

Exposure modelling of engineered nanoparticles in the environment, Gordon Research Conference, Environmental Sciences: Water, Holderness, US, 06-20 thru 25 ▼

Nowack, B./Scholz, R./Reichert, P.

Session on «Risk assessment of engineered nanomaterials», Conference on Environmental Decisions, Ascona, 04-25 thru 29 ♦

Nowack, B./Sonderer, T./Ort, C./Gottschalk, F.

Modeling Environmental Exposure to Engineered Nanomaterial by Probabilistic Material Flow Analysis, Conference on «Environmental Effects of Nanoparticles and Nanomaterials: 2010», Clemson, US, 08-21 thru 26 ♦

Nowack, B./von der Kammer, F./Klaine, S.

Symposium on «Sources, detection, characterisation and fate of nanomaterials», SETAC Europe Annual Meeting, Seville, ES, 05-23 thru 27 ♦

Ott, D./Garraway, E./Kreissler, B./Nicholson, S./Schluep, M.

Addressing E-Waste in Computer Refurbishment Centres of Excellence for Developing Countries: A Case Study in Trinidad and Tobago, Care Innovation 2010, Wien, AT, 11-09 ♦

Ruddy, Th. F.

How Civil Society Organizations Could Help Legal Regulators Catch up with Technology Development in the Governance of Privacy, City University, London, GB, 04-14 ♦

Ruddy, Th. F./Ossés de Eicker, M./Zah, R./Hurni, H.

Potentials of Latin American Pollutant Release and Transfer Registers as a Source of Local Data for Environmental Assessments, International Association of Impact Assessment, Genève, 04-11 ♦ ♦

Schwab, F.

Is carbon nanotube toxicity on green algae just an artefact of shading and agglomeration?, 2nd NanoImpactNet Conf., Lausanne, 03-11 ♦

and SETAC Eur. 20th Ann. I Meet. Sevilla, ES, 05-24 ♦

Schwyzer, I.

Influence of the initial state of CNTs on their solubilization under natural conditions, 2nd NanoImpactNet Conf., Lausanne, 03-11 ♦

and SETAC Eur. 20th Ann. Meet., Sevilla, ES, 05-25 ♦

Som, C.

NanoHouse, Technologie-Briefing Nanomaterialien in Farben und Lacken Chancen nutzen, NanoCluster Bodensee, Dübendorf, 07-6 ▼ ♦ ♦

Safe nanotextiles from a life-cycle perspective,

First EU Nanoconversation, EU Commission, Brussels, BE, 06-15 ♦ ♦

Prospective technology assessment for sustainable innovation: the case of nanotextiles, TA in der Technikgestaltung/NTA 4.

Konf. «Netzwerks TA», Berlin, DE, 11-24 thru 26 ♦

Som, C./Köhler, A./Halbeisen, M.

Strategies for sustainable innovation in emerging technologies – the cases of Nano Textiles and Smart Textiles, Sustainable Innovation 2010, 15th International conference in the ‘Towards Sustainable Product Design’ series, Rotterdam, NL, 11-8 thru 9 ♦

Stamp, A.

Production of lithium carbonate used for Li-ion batteries: Are we facing an environmental bottleneck?, Industrial Ecology Gordon-Kenan Research Seminar, New London, NH, US, 07-10 thru 11 ▼

Stamp, A.

Production of lithium carbonate used for Li-ion batteries: Are we facing an environmental bottleneck?, Industrial Ecology Gordon Research Conference, New London, NH, US, 07-11 thru 16 ▼

Scarce Metals and Emerging Technologies: Strategies towards a

Sustainable Governance, TMS 2010, annual meeting of The Minerals, Metals & Materials Society, Seattle, US, 02-14 thru 18 ♦

Wäger, P.

Hazardous Substance Levels in Plastics from Waste Electrical and Electronic Equipment, WEEE Forum Workshop to discuss recyclability of plastics, Brussels, BE, 07-09 ♦ ♦

Methods for a joint consideration of indicators, Indicators of environmental sustainability in transport – An interdisciplinary approach, Paris, FR, 03-15 ♦ ♦

RoHS Substances in Plastics from Waste Electrical and Electronic Equipment, 3rd WEEE Forum conference, Zürich, 09-24 ♦ ♦

Verwertungsmöglichkeiten von Kunststoffen aus Elektro- und Elektronikabfällen, Praxiserfahrungen Kunststoff – Kunststoffrecycling konkret umgesetzt, Luzern, 11-04 ♦ ♦

Air Pollution/ Environmental Technology

Brunner, D.

Air pollution monitoring from space, SATW Forum 2010: 'Earth Remote Sensing and Observing Systems', Zürich, 10-28 ♦ ♦

Assessing the sources of air pollution in Europe with a high-resolution air quality model,

Topical Day computational Modeling, Dübendorf, 06-17 ♦

In-situ, Lidar, sonde and aircraft observations of volcanic ash in Switzerland, Monitoring Volcanic Ash from Space,

ESA-EUMETSAT Workshop, Frascati, IT, 05-26 thru 27 ♦ ♦

Stickoxide aus Flugverkehr, Schiffsverkehr und Blitzen, Fachtagung Stickstoffverbindungen, Erkenntnisse aus NABEL und Forschungsprojekten, Dübendorf, 01-21 ♦

Brunner, D./Henne, S./Klausen, J./Buchmann, B.

A global Lagrangian model to study trace gas variability and long range transport, Symposium on Atmospheric Chemistry and Physics at Mountain Sites, Interlaken, 06-08 thru 10 ♦

Brunner, D./Henne, S./Keller, C./Reimann, S.

Top-down emission estimation based on Lagrangian Particle Dispersion Modelling and a Kalman-filter based inversion, EGU General Assembly 2010, Vienna, AT, 05-03 thru 07 ▼

Brunner, D./Knote, C.

Aerosol sources in Europe simulated with the high-resolution air quality model COSMO-ART,

Plenary Meeting C2SM, Zürich, 06-07 thru 06-11 ♦

Brunner, D./Zhou, Y./Hüglin, C./Henne, S./Buchmann, B.

European NO₂ changes during the operation period of the Ozone Monitoring Instrument OMI (2004 – present), ESA Living Planet Symposium 2010, Bergen, NO, 06-28 thru 07-02 ♦

Buchmann, B.

GEOmon, Global Earth Observation Monitoring: Overview and Follow-up, ESFRI Environmental meeting, Paris, FR, 02-10 ♦ ♦

GEOmon, Global Earth Observation Monitoring: Overview on Reactive Gases, Pollutants and Climate,

Annual meeting GEOmon, London, GB, 01-18 thru 20 ♦

Greenhouse Gases & Reactive Gases; Challenges of Multi Decadal Time-Series, WMO-BIPM Workshop, Geneva, 03-30 thru 04-01 ♦ ♦

Integrated Carbon Observation System, Status Switzerland, ICOS Stakeholder Meeting, Helsinki, FI, Helsinki, FI, 05-31 thru 06-02 ♦ ♦

Reactive Gases and Greenhouse Gases at The GAW site

Jungfraujoch, Earth Observation Programme Board, Jungfraujoch, 05-28 ♦

Buchmann, B./Reimann, S./Vollmer, M. K.

Reactive gases & Greenhouse Gases, GAW-CH Landesausschuss-Sitzung, Zürich, 10-22 ♦

Buchmann, B./Stähelin, J./Baltesperger, U./Leuenberger, M./Ruffieux, D./Flückiger, E.

Symposium on Atmospheric Chemistry and Physics at Mountain Sites, Interlaken, 06-08 thru 06-10 ♦

Emmenegger, L.

Development and application of quantum cascade laser spectroscopy for CO₂ and N₂O isotopes in environmental research,

Seminar of the Ion Beam Physics group, ETHZ, Zürich, 03-24 ♦ ♦

Neue Messtechniken für Stickstoffverbindungen,

Fachtagung Stickstoffverbindungen, Dübendorf, 01-21 ♦

Emmenegger, L./Tuzson, B./Mohn, J.

Site selective measurements of N₂O isotopomers by laser absorption spectroscopy. EGU, Vienna, AT, 05-04 ▼ ♦

Emmenegger, L./Tuzson, B./Mohn, J./Henne, S./Brunner, D./Steinbacher, M./Buchmann, B.

Regional pollution events observed by continuous measurements of δ¹³C-CO₂ and δ¹⁸O-CO₂ at Jungfraujoch using quantum cascade laser spectroscopy,

Symposium on Atmospheric Chemistry and Physics at Mountain Sites, Interlaken, 06-08 thru 06-10 ♦

Gehrig, R.

Comparison of gravimetric PM measurements with TEOM-FDMS data, 11th Meeting of the EMEP Task Force on Measurement and Modelling, Larnaca, CY, 05-12 thru 14 ♦

Entwicklung der Luftqualität in der Schweiz und in Europa; Erfolge und Probleme, SSM-Tagung 2010, Sursee, 09-22 ♦ ♦

Fachtagung Stickstoffverbindungen, Erkenntnisse aus NABEL und Forschungsprojekten, Dübendorf, 01-21 ♦

Mechanisch erzeugte PM₁₀-Emissionen des Strassenverkehrs

Messkonzept, Messtechnik und Resultate für die selektive Quantifizierung von Abrieb und Aufwirbelung, Abteilungsseminar der Abteilung Luftreinhaltung und NIS, BAFU, Ittingen, 03-04 ♦

Nitrogen compounds in ambient air, an important matter of concern, CEPI Spring meeting Environment Committee, Dübendorf, 05-21 ♦ ♦

NO₂-measurements with different converters: Molybdenum converters vs. specific NO₂ measurements, Workshop and

Conference on Current and Future Air Quality Monitoring, Royal Society of Chemistry, AirMonTech, London, GB, 12-14 thru 15 ♦ ♦

Verfrachtung und Deposition von N-Verbindungen in der Atmosphäre,

Fachtagung Stickstoffverbindungen, Dübendorf, 01-21 ♦

Gianini, M./Gross, D. S./Hueglin, C./Herich, H./Lanz, V. A./Prévôt, A. S. H.

Source apportionment of ambient aerosols based on a combined analysis of ToF-AMS and ATOFMS mass spectra. International Aerosol Conference (IAC 2010), Helsinki, FI, 08-29 thru 09-03 ♦

Gianini, M./Hueglin, C./Gehrig, R./Fischer, A./Wichser, A./Ulrich, A.

Chemical characterisation and source apportionment of ambient PM₁₀ at different Swiss locations: variations between 1998-1999 and 2008-2009. EGU2010, Vienna, AT, 05-02 thru 05 ▼

Gianini, M./Hueglin, C./Gehrig, R./Fischer, A./Wichser, A./Ulrich, A.

Chemical composition of atmospheric PM₁₀ in Switzerland: Comparative analysis of data collected during 1998-1999/2008-2009, Empa PhD Student's Symposium 2010, Dübendorf, 10-07 ♦

Chemische Charakterisierung und Quellen von Feinstaub (PM10) in der Schweiz: Vergleich von Untersuchungen aus den Jahren 1998-1999 und 2008-2009.

and Variation of PM10 chemical composition between kerbside, urban, suburban and rural sites in Switzerland.

14th ETH-Conference on Combustion Generated Nanoparticles – Focus Event, Zürich, 08-01 thru 08-04 ♦ ♦

Henne, S./Brunner, D.

Simulating the dispersion of the Eyjafjalla volcanic ash plume over Europe, 8th Swiss Geoscience Meeting, Fribourg, 11-20 ♦ ♦

Henne, S./Brunner, D./Hügli, C./Wichser, A./Kägi, R.

Simulating the dispersion of the Eyjafjalla volcanic ash plume over Europe, MO Seminar, MeteoSchweiz, Zürich, 11-17 ♦ ♦

Henne, S./Brunner, D./Klausen, J./Buchmann, B.

Inter-Annual Variability of CO and CH₄ Observations Interpreted by a Global Lagrangian Transport Model. EGU2010, Vienna, AT, 05-03 thru 07 ♦

and NOAA ESRL Global Monitoring Annual Conference, Boulder, US, 05-18 thru 19 ♦

A novel Lagrangian transport model for global carbon monoxide and methane simulations, Seminar of the Institute of Applied Physics, Bern, 05-21 ♦ ♦

A global Lagrangian model to study trace gas variability and long range transport, Symposium on Atmospheric Chemistry and Physics at Mountain Sites, Interlaken, 06-08 thru 06-10 ♦

Herich, H./Hueglin, C./Buchmann, B.

A long term source apportionment study of wood burning and traffic aerosols for three measurement sites in Switzerland. EGU, Vienna, AT, 05-04 ♦

A two year's source apportionment study of wood burning and traffic aerosols in Switzerland.

CCES Latsis Symposium, Zürich, 11-15 ▼

Hueglin, C./Gianini, M./Fischer, A./Ulrich, A./Wichser, A./Zellweger, C./Gehrig, R.

Chemical characterisation and source apportionment of ambient PM10 at different Swiss locations: comparative analysis of data collected during 1998-1999 and 2008-2009. International Aerosol Conference (IAC 2010), Helsinki, FI, 08-29 thru 09-03 ♦

Hueglin, Ch.

Chemical characterisation and source apportionment of ambient PM10 in Switzerland: Comparative analysis of data collected during 1998-1999 and 2008-2009;

Source Apportionment Workshop, Basel, 03-29 thru 30 ♦ ♦

Performance of laserspectroscopic technologies for determination of regulated compounds, Workshop and Conference on Current and Future Air Quality Monitoring, Royal Society of Chemistry/AirMonTech, London, GB, 12-14 thru 15 ♦ ♦

Recent technologies for air pollution monitoring, Workshop and Conf. on Current and Future Air Quality Monitoring, Royal Soc. of Chemistry/AirMonTech, London, GB, 12-14 thru 15 ♦ ♦

Hueglin, Ch./Brunner, J./Buchmann, B.

Long-term trend of direct NO₂ emissions from urban road traffic in Zurich, Switzerland. 18th International Symposium Transport and Air Pollution 2010, Dübendorf, 05-18 thru 19 ♦

Hueglin, Ch./Gehrig, R.

Workshop and Conference on Current and Future Air Quality Monitoring, Royal Society of Chemistry/AirMonTech, London, GB12-14 thru 15 ♦

Keller, C. A./Brunner, D./Vollmer, M. K./Henne, S./Reimann, S.

Allocation and trends of halogenated hydrocarbon emissions in Europe as observed from Jungfraujoch, Symposium on Atmospheric Chemistry and Physics at Mountain Sites, Interlaken, 06-08 thru 06-10 ♦

Keller, C. A./Brunner, D./Vollmer, M. K./O'Doherty, S./Manning, A./Reimann, S.

Halogenated greenhouse gas emissions inferred from ambient air measurements and 222Rn. EGU2010, Vienna, AT, 05-03 thru 07 ♦

Keller, C. A./Vollmer, M. K./Brunner, D./Conen, F./Reimann, S.

Halogenated greenhouse gas emissions inferred from ambient air measurements and Radon-222 at Jungfraujoch, Symposium on Atmospheric Chemistry and Physics at Mountain Sites, Interlaken, 06-08 thru 06-10 ▼

Klausen, J./Henne, S.

The Global Atmosphere Watch (GAW) Station Information System – GAWSIS, NOAA ESRL Global Monitoring Annual Conference, Boulder, US, 05-18 thru 19 ▼

Knote, C./Brunner, D./Vogel, H./Vogel, B./Lohmann, U.

Online-coupled chemistry and aerosols: COSMO-ART model performance, IAC, Helsinki, FI, 08-29 thru 09-03 ▼

Knote, C./Brunner, D./Zhou Y./Popp, C./Vogel, H./Vogel, B.

Changing anthropogenic emissions and their regional scale impacts on aerosol characteristics, IGAC, Halifax, CA, 07-12 thru 16 ▼

Manninen, A./Tuzson, B./Emmenegger, L.

Compact Multipass Cell Utilizing Quantum Cascade Laser for Sensitive Breath Air Analysis, Advanced Laser Technologies 2010, Egmond aan Zee, NL, 09-11 thru 16 ♦

Mohn, J./Tuzson, B./Guggenheim, C./Vollmer, M. K./Emmenegger, L.

High precision and site selective measurements of ambient N₂O isotopomers by QCLAS, Nitrogen and the European Greenhouse Gas Balance, Solothurn, 02-03 thru 04 ▼

Site selective measurements of ambient N₂O isotopomers by laser spectroscopy, Stable Isotopes and Biogeochemical Cycles in Terrestrial Ecosystems, Ascona, 03-23 thru 26 ♦

Popp, C./Brunner, D./Zhou, Y./Wang, P./Stammes, P.

MERIS albedo data set with improved spatial resolution for SCIAMACHY NO₂ retrieval over the European alpine region, COSPAR Scientific Assembly 2010, Bremen, DE, 07-18 thru 25 ▼

Popp, C./Wang, P./Brunner, D./Stammes, P./and Zhou, Y.

MERIS albedo climatology and its effect on the FRESCO + O₂ A-band cloud retrieval from SCIAMACHY data, EGU, Vienna, AT 05-07 ▼

Reimann, S./Keller, C. A./Brunner, D./Vollmer, M. K./O'Doherty, S./Manning, A.

[Top-down Validation of European Halocarbon Emission Inventories](#), NOAA annual meeting, Boluder, Boulder, US, 05-18 thru20 ♦ ♦

Reimann, S./Vollmer, M. K.

[Hydrofluoroolefines \(HFOs\): Measured before produced](#), AGAGE-42 meeting, Melbourne, AU, 11-08 thru12 ♦

Reimann, S./Vollmer, M. K./Tuzson, B./Mohn, J.

[isotopes at Empa, AGAGE-42 meeting in Melbourne](#), AGAGE-42 meeting, Melbourne, AU, 11-08 thru12 ♦

Schwarzenbach, B.

[Selektive Messung von NO₂ mit Photolysekonverter](#). 45.

Messtechnisches Kolloquium 2010, Eisenach, DE, 05-10 thru 12 ♦

Seitz, T.

[Das Wartungstool](#), 4. Advis-Arbeitsgruppentreffen, Seggau, AT, 05-31 thru 06-02 ♦

Steinbacher, M.

[Experiences from the Swiss National Air Pollution Monitoring Network](#),

International Workshop on GAW, Jakarta, ID, 10-06 thru 07 ♦ ♦

Steinbacher, M./Brunner, D./Henne, S./Vollmer, M. K./Reimann, S.

[In-situ methane observations at Jungfraujoch: European source allocations and emission estimates](#), Symp. Atmospheric Chemistry and Physics at Mountain Sites, Interlaken, 06-08 thru 06-10 ▼

Steinbacher, M./Klausen, J./Buchmann, B.

[QA / SAC Switzerland Progress Report Fall 2010](#), GAW-CH Landesausschuss-Sitzung, Zürich, 10-22 ♦

Steinbacher, M./Reimann, S./Vollmer, M. K./Hill, M./Hueglin, C.

[VOC observations within the Swiss National Air Pollution Monitoring Network](#), 3rd WMO/GAW expert meeting on global observations of VOCs, Helsinki, FI, 06-29 thru 30 ♦

Steinbacher, M./Schwarzenbach, B./Buchmann, B./Hueglin, C.

[Continuous in-situ air quality measurements at Jungfraujoch as part of the Swiss National Air Pollution Monitoring Network \(NABEL\)](#), Symposium on Atmospheric Chemistry and Physics at Mountain Sites, Interlaken, 06-08 thru 06-10 ▼

Steinbacher, M./Schwarzenbach, B./Zellweger, C./Hueglin, C.

[Continuous in-situ CH₄ and CO₂ Observations at Jungfraujoch using Cavity Ring Down Spectroscopy](#), Swiss Global Change Day, Bern, 04-20 ▼

Steinbacher, M./Zellweger, C./Schwarzenbach, B./Buchmann, B.

[CO measurements with Picarro G1302 – laboratory and field experiments](#), 3rd ICOS Atmospheric Station Workshop, Gif-sur-Yvette, FR, 11-30 thru 12-01 ♦

Tuzson, B.

[In situ investigation of CO₂ dynamics of biosphere-atmosphere carbon exchange based on real-time measurement of \$\delta^{13}\text{C}\$ and \$\delta^{18}\text{O}\$ by QCLAS](#), COST-SIBAE WG3 Laser Workshop, Dübendorf, 06-15 thru 16 ♦

Tuzson, B./Mohn, J./Steinbacher, M./Henne, S./Brunner, D./Emmenegger, L.

[Long-term and in situ spectroscopic measurements of \$\delta^{13}\text{C}\$ and \$\delta^{18}\text{O}\$ of CO₂ at Jungfraujoch \(3580 masl\) reveal regional pollution events](#), ISI 2010x, Amsterdam, NL, 06-21 thru 25 ♦

Vollmer, M. K.

[Atmospheric halogenated trace gases automated measurements using gas chromatography – mass spectrometry \(GC-MS\)](#). Agilent Forum, Basel, 09-07 thru -09-08 ♦

Vollmer, M. K./Hill, M./Wenger, A.

[Medusa Technology – Gas Chromatography Mass Spectrometry for halogenated trace gases](#). Chinese Academy of Meteorological Sciences, Beijing, CN, 05-07 ♦ ♦

Vollmer, M. K./Hill, M./Wenger, A./Reimann, S./Hermansen, O./Schmidbauer, N.

[Atmospheric halogenated trace gases – at Ny Alesund and in the global atmosphere](#). Weekly Science seminar, Ny Alesund, Spitsbergen, NO, 08-31 ♦ ♦

Vollmer, M. K./Reimann, S. et al.

[Atmospheric histories and global emissions of the anthropogenic hydrofluorocarbons \(HFCs\) HFC-365mfc, HFC-245fa, HFC-227ea, and HFC-236fa](#). 41st Meeting of AGAGE scientists and Cooperating Networks, Beijing, CN, 06-07 thru 06-11 ♦

Vollmer, M. K./Reimann, S./AGAGE team, SOGE team

[Atmospheric halogenated trace gases – measurements, global distributions, histories, and emissions](#), ETH Zurich, Inst for Environmental Physics, Zürich, 08-11 ♦ ♦

Vollmer, M. K./Reimann, S.

[CF₄: Performance differences between new and old Medusae](#).

[and Positive ion effects in MS: Problems with CFC \(and other\) measurements](#).

[and Short-lived Bromo-Species: A first simplified view](#).

AGAGE-42 meeting, Melbourne, AU, 11-08 thru12 ♦

Vollmer, M. K./Reimann, S./Wenger, A./Hill, M.

[MEDEMPA progress in China and Spitsbergen](#), AGAGE-42 meeting, Melbourne, AU 11-08 thru12 ♦

Zellweger, C./Buchmann, B./Klausen, J./Steinbacher, M.

[World Calibration Center WCC-Empa](#), GAW-CH Landesausschuss-Sitzung, Zürich, 10-22 ♦

Zeyer, K./Schrade, S./Keck, M./Emmenegger, L.

[Bestimmung von Ammoniakemissionen bei freibellüfteten Milchviehställen mittels zweier Tracergase](#). 45. Messtechnisches Kolloquium 2010, Eisenach, DE, 05-10 thru 12 ♦

Zhou, Y./Brunner, D./Spurr, R./Stammes, P./Popp, C./Sneep, M./Boersma, F.

[An improved tropospheric NO₂ retrieval based on high-resolution anisotropic surface reflectance data](#), ESA Living Planet Symposium 2010, Bergen, NO, 06-28 thru 07-02 ▼

Analytical Chemistry

Hagendorfer, H./Koeppel, S./Hanus-Ilmar, A./Ulrich, A.
Determination of Cr(VI), selected heavy metals, and elemental carbon in PM10 from a roadside sampling spot in Vienna, 14th Conference on Combustion Generated Nanoparticles, ETH Zürich, 08-01 thru 04 ▼

Hagendorfer, H./Lorenz, C./Kaegi, R./Sinnet, B./v. Goetz, N./Scheringer, M./Gehrig, R./Ludwig, C./Ulrich, A.
Characterization and quantification of nanoparticle release demonstrated on a commercial available spray product containing engineered nanoparticles, SETAC Europe 20th Annual Meeting, Seville, ES, 05-23 thru 27 ♦

Hagendorfer, H./Ludwig, C./Ulrich, A.
Asymmetric Flow-Field-Flow-Fractionation (AF4) in combination with UV/VIS, Light Scattering and ICP Mass Spectrometry for the Analysis of Engineered nanoparticles (ENP), Wyatt Seminar: Particle Characterization – Advanced Characterization of Particles by Asymmetric Flow-Field-Flow-Fractionation (AF4) and Multi-Angle Light Scattering (MALS), Dornbach, DE, 09-28 ▼ ♦

Hagendorfer, H./Parlinska-Wojtan, M./Kägi, R./Sinnet, B./Wandlowski, Th./Liu, X./Ludwig, C./Ulrich, A.
Asymmetric flow field flow fractionation (AF4) in combination with a multi-detector approach for the characterization of engineered nanoparticles, 5th Late Summer Workshop Nanoparticles and Nanomaterials in Aquatic Systems, Schloss Maurach, Lake Constance, DE, 09-28 thru 10-01 ♦

Hagendorfer, H./Traber, J./Sinnet, B./Ludwig, C./Ulrich, A.
Coupling of asymmetric field flow fractionation (A4F) to inductively coupled plasma mass spectrometry (ICPMS) for engineered nanoparticle (ENP) analysis, SETAC Europe 20th Annual Meeting, Seville, ES, 05-23 thru 27 ▼

Heeb, N. V.
Reactive Nitrogen Compounds after SCR and Combined SCR-DPF Systems, 1. VERT Forum, Dübendorf, 03-19 ♦ ♦

Secondary emission test for combined DPF-deNOx systems, Conference VERT dePN, Dübendorf, 03-18 ♦ ♦

Transformationsprozesse von Hexabromcyclododecanen: Eine Herausforderung für Analytiker und Toxikologen, NFP50 Tagung: Hormonaktive Stoffe, Bern, 09-07 ♦ ♦

Heeb, N. V./Vonmont, H./Mayer, A.
Challenges and Opportunities of BAT Retrofit Particle Filters, 1. VERT Forum, Dübendorf, 03-19 ♦

Müller, C./Herbst, N./Gerecke, A./Scheringer, M./Hungerbühler, K.
Perfluorinated chemicals in Non-Industrial River Catchments, 2nd International Workshop Fluorinated Surfactants: New Developments, Idstein, DE, 06-19 thru 19 ♦

Ott, N./Tournier Fillon, A./Homazava, N./Schmutz, P./Ludwig, C./Ulrich, A.
Investigations of local corrosion processes on magnesium alloys using a novel online microflow capillary FI-ICP-MS set-up, CUSO Summer School: Nanoelectrochemistry, Villars, 09-05 thru 09 ▼

Senn, M.
An iron fibula work-shop in the Oppidum at Rheinau ZH Switzerland, Symposium on the Metallurgy of the European Iron Age SMEIA, Mannheim, DE, 04-20 thru 22 ♦

Ulrich, A.
European Symposium on Atomic Spectrometry ESAS 2010, University of Technology, Wroclaw, PL, 09-05 thru 08 ♦

Field Flow Fractionation Online Coupled to Plasma Mass Spectrometry for Analysis of Macromolecules and Nanoparticles, CCMX NMMC Workshop Nanoscale analytics of materials for industrial applications, Empa Duebendorf, 06-03 ♦ ♦

Ulrich, A./Emmenegger, L./Wichser, A./Honegger, P./Stilli, J./Matam, S. K./Ferri, D./Winkler, A./Vonmont, H./Buchmann, B./Bach, C.
Tracer Study to assess the effect of lubrication oil and fuel on catalyst aging for different combustion techniques, oil and fuel types, 14th Conference on Combustion Generated Nanoparticles, ETH Zürich, 08-01 thru 04 ▼

Ulrich, A./Hagendorfer, H./Ludwig, Ch.
Size fractionated analysis of engineered nanoparticles using FFF-ICP-MS, European Symposium on Atomic Spectrometry ESAS 2010, University of Technology, Wroclaw, PL, 09-05 thru 08 ♦ ♦

Ulrich, A./Hagendorfer, H./Wichser, A./Künniger, T./Heeb, N. V./Wick, P./Som, C./Nowack, B.
Release of Nanoparticles from Materials into the Environment, SETAC Europe 20th Annual Meeting, Seville, ES, 05-23 thru 27 ♦ ♦

Ulrich, A./Ott, N./Homazava, N./Schmutz, P.
A novel online-micro-flow capillary FI-ICP-MS set-up with electrochemical control for time-and element-resolved investigation of the corrosion behaviour of metals for medical applications, European Symposium on Atomic Spectrometry ESAS 2010, University of Technology, Wroclaw, PL, 09-05 thru 08 ▼

Vonmont, H./Ulrich, A.
Nanomaterialien in Farben und Lacken: Auswaschungen aus Fassaden, Workshop Nanomaterialien in Farben und Lacken, Empa Duebendorf, 07-06 ▼ ♦

Wang, J.
Measurement for Metallic Nanoparticle Agglomerates Generated from Spark-discharge using the UNPA, 4th Intern. Aerosol Conf. 2010, Helsinki, FI, 08-29 thru 09-03 ▼

Wang, J./Asbach, C./Hülser, T./Fissan, H./Kuhlbusch, T. A. J./Pui, D. Y. H.
Exposure Measurement during the Production of Silicon Nanoparticles in a Pilot Scale Facility, 4th International Aerosol Conference 2010, Helsinki, FI, 08-29 thru 09-03 ♦

Wang, J./Kim, S. C./Pui, D. Y. H.
Carbon Nanotube Filtration, 29th Annual Conference of American Association for Aerosol Research (AAAR), Portland, US, 10-25 thru 29 ♦

Wang, J./Ling, T. Y./Pui, J.
Liquid-borne Nanoparticle Filtration: Measurement Techniques and Applications, 6th China International Conference Filtration & Separation, Shanghai, CN, 11-18 thru 19 ♦

Wang, J./Liu, J./Swanson, J./Pui, D. Y. H.
[Characteristics of Diesel Particulate Matter Loading on PTFE Membrane Filters](#), 14th Conference on Combustion Generated Nanoparticles, ETH Zürich, 08-01 thru 04 ♦

Wang, J./Thompson, D./Swanson, J./Pui, D. Y. H.
[Assessment of Carbon Nanotube Exposure in the Production of Nanocomposites](#), 29th Annual Conference of American Association for Aerosol Research (AAAR), Portland, US, 10-25 thru 29 ▼

Zennegg, M./Schmid, P./Trempp, J.
[PCB fish contamination in Swiss rivers – tracing of point sources](#), Int. Symposium on Halogenated Persistent Organic Pollutants POPs, San Antonio, US, 09-12 thru 17 ▼ ♦

Hydrogen & Energy

Bielmann, M.
[Best of both worlds: H2-Battery Standalone Power Systems](#), IBM Corporate Research, Rüschlikon, Zürich, 09-15 ♦

[Der Weg des Wasserstoff von der Herstellung bis in den Tank](#), VÖV Fachtagung KTBB, OLMA-Messen, St. Gallen Hallen 2.1 und 3.1, 04-29 ♦ ♦

[Hydrogen powered APU for mobile rail catering service: The IHPOS-E project](#), 4th International Symposium Hydrogen & Energy, Hotel Hirschen, Wildhaus, 01-24 thru 29 ♦ ♦

Borgschulte, A.
[From microspots to hydrogen storage by vibrational spectroscopy](#), 4th International Symposium Hydrogen & Energy, Hotel Hirschen, Wildhaus, 01-24 thru 29 ♦ ♦

[Hydrogen sorption kinetics, reaction dynamics, and spectroscopy](#), Empa - KIST Workshop, Hotel Hirschen, Wildhaus, 01-22 thru 23 ♦ ♦

[and 1st Intern. Conf. on Materials for Energy](#), ENMAT2010, Karlsruhe, DE, 07-04 thru 08 ♦

Caputo, R.
[Bridging the length-scale in computational materials science: First-principles modelling materials for hydrogen storage](#), University Pardubice-Institute of Physics-ASCR-Prague, CZ, 01-18 thru 19 ♦ ♦

Friedrichs, O.
[Breaking the passivation – the road to a solvent free borohydride synthesis](#).

[and Role of B12H12 for the formation and decomposition of borohydrides](#), 1st Intern. Conf. on Materials for Energy, ENMAT2010, Karlsruhe, DE, 07-04 thru 08 ▼

Friedrichs, O.
[Diborane – The key to reversible hydrogen storage](#), 4th International Symposium Hydrogen & Energy, Hotel Hirschen, Wildhaus, 01-24 thru 29 ♦ ♦

[and Intern. Symp. «Metal-Hydrogen Systems. Fundamentals and Applications»](#), Moscow, RU, 07-19 thru 23 ♦

Gorbar, M.
[Porosity graded ZrO₂ diaphragms for alkaline electrolysis](#), 4th International Symposium Hydrogen & Energy, Hotel Hirschen, Wildhaus, 01-24 thru 29 ♦ ▼

Gremaud, R.
[Solid-gas synthesis mechanism of alkali borohydrides](#), Empa - KIST Workshop, Hotel Hirschen, Wildhaus, 01-22 thru 23 ♦ ♦

[Time and frequency hydrogen dynamics in LiBH₄ by infrared pump probe spectroscopy](#), 4th International Symposium Hydrogen & Energy, Hotel Hirschen, Wildhaus, 01-24 thru 29 ♦ ♦

Herzog, V.
[Hydrogen production by alkaline electrolysis: surface investigations of materials for membranes](#), International Symposium «Metal-Hydrogen Systems. Fundamentals and Applications», Moscow, RU, 07-19 thru 23 ▼

[XPS study of materials for membranes in alkaline electrolysis](#), 4th International Symposium Hydrogen & Energy, Hotel Hirschen, Wildhaus, 01-24 thru 29 ♦ ♦

Kato, S.
[Hydrogen desorption mechanisms at various hydrides surfaces](#), MC RTN Hydrogen Conference "Nano- and Surface Approaches to Production & Storage of Hydrogen", Noordwijkerhout, NL, 11-14 thru 19 ♦

[Hydrogen sorption mechanisms at various hydrides surfaces](#), Empa-KIST Workshop, Georje, KR, 08-17 thru 19 ♦

[Hydrogen sorption mechanisms at various hydrides surfaces and towards synthetic fuels](#), International Symposium «Metal-Hydrogen Systems. Fundamentals and Applications», Moscow, RU, 07-19 thru 23 ♦

[Roles of surface oxide layer in hydrogen desorption processes](#), 4th International Symposium Hydrogen & Energy, Hotel Hirschen, Wildhaus, 01-24 thru 29 ♦ ♦

Martelli, P.
[BH₄ diffusion in liquid LiBH₄](#), PhD Students' Symposium Empa, Dübendorf, 10-07 ♦

[Kinetic and QENS to study complex hydrides](#), Hydrogen and Fuel Cell Early Market Application, Ulster University, Belfast, UK, 10-11 thru 15 ♦

[NMR studies on Li₂\(BH₄\)\(NH₂\) and Li₄\(BH₄\)\(NH₂\)₃](#), 4th International Symposium Hydrogen & Energy, Hotel Hirschen, Wildhaus, 01-24 thru 29 ♦ ▼

Martelli, P.
[NMR studies on Li₂\(BH₄\)\(NH₂\) and Li₄\(BH₄\)\(NH₂\)₃](#), 4th International Symposium Hydrogen & Energy, Hotel Hirschen, Wildhaus, 01-24 thru 29 ♦ ▼

Mauron, Ph.
[Borohydrides](#), 4th International Symposium Hydrogen & Energy, Hotel Hirschen, Wildhaus, 01-24 thru 29 ♦ ♦

[Experimental Methods at Empa](#), HyCarBo Kickoff-Meeting, Empa, 05-11 ♦

[Stability of the LiBH₄-CeH₂ System](#), Empa - KIST Workshop, Hotel Hirschen, Wildhaus, 01-22 thru 23 ♦ ♦

Pendolino, F.
[Hydrogen evolution from decomposition of borohydrides: The «Boron Effect»](#), 4th International Symposium Hydrogen & Energy, Hotel Hirschen, Wildhaus, 01-24 thru 29 ♦ ▼

Remhof, A.
[Borohydride Research at Empa](#), Orimo Laboratory, Institute of Materials Research (IMR), Tohoku University, Sendai, JP, 09-04 ♦

[Challenges in Solid Hydrogen Storage](#), 2nd HZB-Joint User's Meeting of BESSY II and BER II, WISTA-Centre and BESSY II, Berlin-Adlershof, DE, 12-09 thru 10 ♦ ♦

[Diborane and Borohydrides](#), Empa - KIST Workshop, Hotel Hirschen, Wildhaus, 01-22 thru 23 ♦ ♦

[Hydrogen Dynamics and Ion Conductivity in Li-based Complex Hydrides](#), Institute of Materials Research (IMR), Tohoku University, Sendai, JP, 10-08 ♦ ♦

[Hydrogen dynamics in solid and in liquid LiBH₄](#), Empa-KIST Workshop, Geoeje, KR, 08-17 thru 19 ♦

[Rotating BH₄ in alkali metal borohydrides](#), MC RTN Hydrogen Conference "Nano- and Surface Approaches to Production & Storage of Hydrogen", Noordwijkerhout, NL, 11-14 thru 19 ♦

[and 1st Intern. Conf. on Materials for Energy, ENMAT2010](#), Karlsruhe, DE, 07-04 thru 08 ♦

[Rotational diffusion in MBH₄ \(M = Li, Na, K\)](#), 4th International Symposium Hydrogen & Energy, Hotel Hirschen, Wildhaus, 01-24 thru 29 ♦ ♦

Stojadinovic, J.
[Electrochemical Impedance Spectroscopy of Different Porous Materials Used as Diaphragms in High Pressure Alkaline Electrolysers](#), 3rd Intern. Conf. Porous Media and its Applications in Science, Engineering and Industry, IT, 06-20 thru 25 ▼

[Electrochemical Impedance Spectroscopy of Porous Diaphragms Used in Alkaline Electrolysers for Hydrogen Production](#), 8th International Symposium on Electrochemical Impedance Spectroscopy, PT, 06-06 thru 12 ▼

[Electrochemical Study of Porous Diaphragms used in Alkaline Electrolysers for Hydrogen Production](#), International Symposium «Metal-Hydrogen Systems. Fundamentals and Applications», Moscow, RU, 07-19 thru 23 ▼

[High Pressure Alkaline Electrolysis for Hydrogen Production: Electrochemical Study of Porous Diaphragms](#), 26th One-Day-Symposium Electrochemistry Laboratory, Paul Scherrer Institute PSI, 05-05 ▼

[Hydrogen production by alkaline electrolysis](#), Natural Resources and Pollutants Seminar, Empa Duebendorf, 10-04 ♦ ♦

Vogt, U.
[Hydrogen technology for a self-sufficient accommodation unit](#), 4th International Symposium Hydrogen & Energy, Hotel Hirschen, Wildhaus, 01-24 thru 29 ♦ ♦

Wiedenmann, D.
[Impact of multi-scale pore structure on ion conductivity of asbestos gas separation diaphragms for alkaline water electrolysis](#), 4th International Symposium Hydrogen & Energy, Hotel Hirschen, Wildhaus, 01-24 thru 29 ♦ ▼

[Melilite-Group Minerals at Oldoinyo Lengai, Tanzania](#), CoV 6th conference, Puerto de la Cruz, Tenerife, ES, 05-31 thru 06-04 ▼

[Multi-scale 3D pore structure and ion conductivity of asbestos gas separation membranes for alkaline water electrolysis](#), International Symposium «Transport in porous materials, microscopy and modelling»; PSI, Villigen, 08-19 thru 20 ▼

Züttel, A.
[Empa Hydrogen & Energy](#), GA N.ENERGY, Hotel Melia Barajos, Madrid, ES, 04-14 ♦

[Energie und Energiespeicherkonzepte](#), 11. NanoMat-Szene, KIT, Karlsruhe, DE, 04-13 ♦ ♦

[Back to the future: The future of hydrogen](#), Symposium Ronald Griessen, Energy 2010, Amsterdam, NL, 07-02 ♦ ♦

[Energy Carriers and the Role of Nanostructures](#), TransalpNano Conference, Como, IT, 06-03 ♦ ♦

[From Hydrides to Synthetic fuels](#), 4th International Symposium Hydrogen & Energy, Hotel Hirschen, Wildhaus, 01-24 thru 29 ♦ ♦

[Hydrogen based Energycarriers](#), Distinguished Fuel Cell Hydrogen Lectures, Chemical Engineering, University of Birmingham, UK, 07-28 ♦ ♦

[Hydrogen storage and the role of nanomaterials](#), ESF Research Conferences, Universitätszentrum, Obergurgel, AT, 07-04 thru 09 ♦ ♦

[Synthetic Energy Carriers](#), D-ITET Colloquium ETHZ, Zürich, 03-15 ♦ ♦

[Synthetic Energy Carriers](#), University of Pavia, Pavia, IT, 06-02 ♦ ♦

[The Hydrogen Sorption Mechanism and Thermodynamics of Borohydrides](#), MC RTN Hydrogen Conference, Noordwijkerhout, NL, 11-14 thru 19 ♦ ♦

[The Physics of Energy Storage and the Role of Hydrogen](#), Physics@FOM, Veldhoven, NL, 01-20 ♦ ♦

[The thermodynamics and hydrogen sorption mechanism of borohydrides](#), Intern. Symposium «Metal-Hydrogen Systems. Moscow, RU, 07-19 thru 23 ♦ ♦

Internal Combustion Engines

Alvarez, R./Schlienger, P./Weilenmann, M.

[Effect of Battery Performance on Determining CO₂ Emissions of Hybrid Electric Vehicles under Real-World Conditions](#), 18th International Symposium Transport and Air Pollution, Dübendorf, 05-18 thru 19 ♦

Alvarez, R./Weilenmann, M./Bach, Ch.

[Potential of Natural Gas Powered Vehicles in Reducing CO₂ and Pollutant Emissions under Real-World Driving Conditions](#), FISITA World Congress 2010, Budapest, HU, 05-31 thru 06-04 ♦

Bach, Ch.

[Tage der Technik](#), Empa Dübendorf, 10-27 ♦

Bach, Ch./Winkler, A./Ulrich, A./Ferri, D.

[Euro Oil & Fuel 2010 conference](#), Crakow, PL, 11-24 thru 26 ♦

Boulouchos, K./Jansohn, P./Soltic, P.

[Clean and Efficient Large Diesel Engines](#), Energietagung, Villigen PSI, 06-11 ▼♦

Dimopoulos, P./Eggenschwiler, K./Liati, A.

[Soot and Ash Layer Characteristics in Ceramin Diesel Particulate Filters](#), 12th International CIMTEC Conference, Montecatini Terme, I, 06-07 thru 11 ♦♦

Dimopoulos, P./Eggenschwiler, K./Liati, A./Winkler, A.

[Russaufbau und -abbauphänomene sowie Ascheakkumulation in Dieselpartikelfilter – Layer Evolution as well as Ash Accumulation Phenomena in Diesel Particulates Filter](#), 10. Internationales Stuttgarter Symposium «Automobil- und Motorentechnik», Stuttgart, DE, 03-16 thru 17 ♦

Egli, R.

[Clean and Efficient Vehicle Research](#), Empa PhD-Symposium 2010, Empa Dübendorf, 07-10 ▼

Guzzella, L./Onder, Ch./Amstutz, A./Ott, T./Boulouchos, K./

Soltic, P./Weidenkaff, A./Brunko, O./Populoh, S./Sennhauser, U./Berdinas, V./Held, M.
[Cohyb](#), Energietagung, Villigen PSI, 06-11 ▼♦

Hofer, P.

[Jahrestagung 2010 des Verbands e'mobile](#), Sion, 08-25 ♦♦

[Tage der Technik](#), Empa Dübendorf, 10-27 ♦

Karpf, A./Schreiber, D./Dimopoulos, P./Eggenschwiler, K./Wachter, R.

[Passive and active regeneration modes and their characteristics on a modern diesel Particulate filter system](#), 18th International Symposium Transport and Air Pollution, Dübendorf, 05-18 thru 19 ▼

Schlienger, P.

[Elektrische Antriebe und Brennstoffzellen – Eigenschaften und Potenzial im Vergleich zu Hydraulik und Mechanik](#), Agrartechniktage, Agroscope, Tänikon, 06-16 ♦♦

Soltic, P.

[New Heavy Duty Engine Research Facility at Empa \(TransEng Testing\)](#), Energietagung, Villigen PSI, 06-11 ▼♦

Soltic, P./Bach, Ch.

[Katalytische Kolbenbeschichtung in Gasmotoren / Catalytic piston coating in gas engines](#), 5th Conference Gas Powered Vehicles – The Alternative to E-Mobility?, Berlin, DE, 09-30 thru 10-01 ♦♦

Soltic, P./Edenhauser, D./Thurnheer, T./Schreiber, D./Sankowski, A.

[Combustion of mineral diesel and alternative fuels in a heavy duty on-road engine with combined Nox and particle exhaust gas treatment](#), 18th International Symposium Transport and Air Pollution, Dübendorf, 05-18 thru 19 ♦

Weilenmann, M./Tsinoglou, D./Stilli, J.

[Simplified Reaction Modelling of Automotive Catalytic Converters](#), FISITA World Congress 2010, Budapest, HU, 05-31 thru 06-04 ▼

Weimer, S./Richter, R./Mohr, C./Schreiber, D./Prevot, A. S. H./

Mohr, M./Dimopoulos, P./Eggenschwiler, K.
[Particles emitted by 2- and 4-stroke engines: Aspects from chasing and test bench experiments](#), 18th International Symposium Transport and Air Pollution, Dübendorf, 05-18 thru 19 ♦

Winkler, A.

[Grundlagen der Röntgenphotoelektronenspektroskopie](#), DE Referenzbüro für Lebensmittelringversuche und Referenzmaterialien, Kempten, DE, 08-25 ♦♦

Winkler, A./Ferri, D./Santhosh Kumar, M./Aguirre, M.

[Influence of phosphorous aging on diesel oxidation catalysts](#), 14th Nordic Symposium on Catalysis, Helsingor, DK, 08-28 ▼

[and Swiss Chemical Society Fall Meeting 2010](#), Zuerich, 09-16 ▼

Winkler, A./Ferri, D./Santhosh Kumar, M./Aguirre, M.

[Aging phenomena in diesel oxidation catalysts](#), Emission Control Concepts Conference, Stuttgart, DE, 11-30 ♦♦

Solid State Chemistry and Catalysis

Aguirre, M. H./Robert, R./Shkabko, A./Tomeš, P./Weidenkaff, A./Canulescu, S./Heiroth, S./Lippert, T.
Structure and thermoelectric properties of perovskite materials: a comparison between powder and thin films,
Workshop on: Nanostructured Thermoelectric Materials;
Physikzentrum Bad Honnef, DE, 02-21 thru 24 ▼

Aguirre, M.H./Schaeuble, N./Romanyuk, Y./Weidenkaff, A.
Synthesis and thermoelectric properties of aluminum-doped zinc oxide, Swiss Physical Society Meeting, SPS 2010, Basel University, 06-21 thru 22 ▼

Aguirre, M. H./Shkabko, A./Bocher, L./Weidenkaff, A./Wang, P./Schaffer, B./Gass, M./Bangert, U.
HAADF-STEM and EELS-EDX study on SrTiO₃-x:My obtained by microwave NH₃ plasma/Past, Present and Future of (S)TEM and its applications, University of Paris-Sud, FR, 07-08 thru 11 ▼

and Workshop on EELS & EFTEM in EMEZ-ETH,
ETH Zürich, 10-24 thru 27 ▼

Aguirre, M. H./Tomeš, P./Robert, R./Jiménez-Villacorta, F./Otal, E./Weidenkaff, A.
Transport properties and crystal structure of PrCo_{1-x}Ni_xO₃ mixed-valence oxides,
Proceeding of the ECT-2010, Como, IT, 09-22 thru 24 ♦♦

Alfaruq, D. S./Aguirre, M. H./Bocher, L./Hug, P./Karvonen, L./Mandaliev, P./Populoh, S./Tomes, P./Weidenkaff, A.
Discovering and Tailoring Materials for All-Oxide Thermoelectric Module, Shanghai, Cn, 05-30 thru - 06-03 ▼

Bocher, L./Aguirre, M. H./March, K./Kumar, S. M./Ferri, D./Colliex, C./Stéphan, O.
Hydrothermal aging of Rh-based automotive catalysts: An atomic level investigation,
7th IMC17, Rio de Janeiro, BR, 09-19 thru 24 ▼♦

Brunko, O./Populoh, S./Trottmann, M./Weidenkaff, A./Cabalzer, U.
Tag der Technik: Verstromung von Abgaswärme,
Dübendorf, 10-27 ▼

Eyssler, A.
Summer School Caen, Caen, FR, 07-19 thru 23

Eyssler, A./Kumar, S. M./Hug, P./Weidenkaff, A./Ferri, D.
Activation strategies for LaFe_{0.95}Pd_{0.05}O₃ towards improved oxidation of methane, SCS Fallmeeting, Zürich, 09-16 ▼

Improved methane oxidation activity of LaFe_{0.95}Pd_{0.05}O₃ under cyclic operation, XIV Congresso Nazionale di Catalisi, Palermo, IT, 09-19 thru 23 ▼♦

Eyssler, A./Weidenkaff, A./Ferri, D.
The influence of the Pd-state in Pd-doped LaFeO₃ perovskites on CH₄ combustion, Swiss National Fonds Meeting, Murten, 04-23 ♦

and 43. Jahrestreffen Deutscher Katalytiker,
Weimar, DE, 03-10 thru 12 ▼

Ferri, D.
Conventional and advanced characterization of automotive catalysts; PSI, Vililgen, 03-26 ♦♦

and nanoMat 11. Szene, Karlsruhe, DE, 04-13 thru 14 ♦♦

Precious metal-doped catalysts for energy production and environment protection,
Polish-Swiss Cooperation programme, Warsaw, PL, 01-14 thru 15 ♦

Ferri, D./Kumar, S. M./Hug, P./Weidenkaff, A./Newton, M. A.
CO-NO concentration modulation study to make EXAFS surface sensitive,
XIV Congresso Nazionale di Catalisi, Palermo, I09-19 thru 23 ♦

Making EXAFS surface sensitive? Red-ox cycles on Rh/Al₂O₃,
14th Nordic Symposium on Catalysis, Zurich, 08-29 thru 31 ♦

Ferri, D./Kumar, S. M./Weidenkaff, A./Newton, M. A.
Making EXAFS surface sensitive? Red-ox cycles on Rh/Al₂O₃;
Fall Meeting Swiss Chemical Society, Zurich, 09-16 ♦

Jäger, T./Mix, C./Populoh, S./Weidenkaff, A./Jakob, G.
Thermoelectric Winter school: Thermoelectric properties of thin film Heusler compounds, Bremen, DE , 02-14. - 19. ♦

Karvonen, L./Alfaruq, D. S./Aguirre, M./Bocher, L./Hug, P./Mandaliev, P./Populoh, S./Tomes, P./Weidenkaff, A.
Engineering Leg-Materials for All-Oxides Thermoelectric Module,
SPS Annual Meeting 2010, Basel, 06-21 thru 22 ▼

Karvonen, L./Tomeš, P./Trottmann, M./Brunko, O./Alfaruq, D. S./Bocher, L./Populoh, S./Aguirre, M./Hug, P./Weidenkaff, A.
Discovering and Tailoring Materials for All-Oxide Thermoelectric Module, ICT 2010, Shanghai, CN, 05-30 thru 6-3 ▼

Karvonen, L./Yoon, S./Hug, P./Karppinen, M./Weidenkaff, A.
Time-Resolved Study of the SrCoO_{3-d} Reduction in Air at Mild-Tempretature Range (100-300 °C), 7th International Conference on Inorganic Materials, Biarritz, FR, 09-11 thru 14 ▼

Koenig, C./Ferri, D./Nachtegaal, M./Schildhauer, T.
Excitation Modulation spectroscopy with Quick-XAS on Ru catalysts; Fall Meeting Swiss Chemical Society, Zurich, 09-16 ▼

Korsak, O./Wen, F./Kumar, S. M./Hug, P./Giesshof, J./Weidenkaff, A./Ferri, D.
The effect of hydrothermal aging on the structure and activity of three-way catalysts,
14th Nordic Symposium on Catalysis, Helsinore, DK, 08-29 thru 31 ▼

Kumar, S. M./Eyssler, A./Weidenkaff, A./Ferri, D.
Behaviour of Pd during CH₄ combustion on Pd/Al₂O₃ monitored by operando X-ray absorption spectroscopy, Meeting of the American Chemical Society, San Francisco, US, 03-21 thru 25 ♦

Kumar, S. M./Aguirre, M. H./Weidenkaff, A./Ferri, D.
Methane combustion on Pd catalysts: structure activity studies by operando XANES under genuine conditions;
Fall Meeting Swiss Chemical Society, Zurich, 09-16 ▼

Operando XANES for structure activity studies: Combustion of methane on Pd/Al₂O₃ under genuine conditions,
14th Nordic Symposium on Catalysis, Helsinore, DK, 08-29 thru 31 ▼

Operando XANES study of methane oxidation on 2 wt% Pd/Al₂O₃ under genuine conditions, XIV Congresso Nazionale di Catalisi, Palermo, Palermo, IT, 09-19 thru 23 ▼◆

Maegli, A./Yoon, S./Mandaliev, P./Leroy, C./Thimsen, E./Chiarello, G./Grätzel, M./Weidenkaff, A.

Perovskite-type Oxynitrides as Photocatalysts, Biarritz, FR, 09-11 thru 14 ▼

Otal, E./Aguirre, M. H./Weidenkaff, A.
Evolution of the hierarchical order in nanostructured colloids with the thermal treatment, Zurich, 09-06 ▼

Otal, E./Yoon, S./Aguirre, M./Weidenkaff, A.
Study of the metastability of heavy lanthanides in the ZnO wurtzite structure: A structural study, Zurich, 07-04 thru 07-09 ▼

Populoh, S.
2nd Shanghai International Workshop on High Performance Ceramics, Hangzhou, CN, 05-27 thru 30 ◆◆

Populoh, S./Alfaruq, D. S./Trottmann, M./Brunko, O./Hug, P./Aguirre, M. H./Weidenkaff, A.
Engineering Leg-Materials for All-Oxides Thermoelectric Module; Swiss Physical Society Meetin 2010, Basel University, 6-21 thru 22 ▼

Populoh, S./Brunko, O./Trottmann, M./Weidenkaff, A./Cabalzer, U.
IAV Thermoelectricity goes Automotive: Verstromung von Abgaswärme, Berlin, DE, 12-8 thru 10 ▼

Populoh, S./Jäger, T./Mix, C./Weidenkaff, A./Jakob, G.
ICT 2010: Half-Heusler thin film superlattices for thermoelectrics, Shanghai, CN, 05-30 – 06-03 ▼

Populoh, S./Shkabko, A./Weidenkaff, A./Jaeger, T./Mix, C./Schwall, M./Balke, B./Felsler, C./Jakob, G.
SPS meeting 2010: High performance thermoelectric materials, bulk and thin films of half-Heusler alloys, Basel, CN, 06-21 thru 22 ▼

Populoh, S./Weidenkaff, A./Ouardi, S./Balke, B./Felsler, C.
Thermoelectricity in TiNiSn and ZrNiSn half Heusler compounds, Thermoelectric Winter school, Bremen, DE, 02-14 thru 19 ▼

High temperature (300K – 1000K) thermoelectricity in TiNiSn and ZrNiSn half Heusler compounds, Nanostructured Thermoelectric Materials, Bad Honnef, DE, 02-21 thru 23 ▼

and MRS spring meeting 2010, San Francisco, US, 04-05 thru 09 ▼

Schaeuble, N./Romanyuk, Y./Aguirre, M. H./Shkabko, A./Tomeš, P./Weidenkaff, A.

Aluminum doped Zinc Oxides thin films: Thermoelectric properties and characterization, Nanostructured Thermoelectric Materials; Bad Honnef, Bad Honnef, DE, 2-21 thru 24 ▼

Schaeuble, N./Romanyuk, Y./Robert, R./Trottmann, M./Hug, P./Bocher, L./Aguirre, M. H./Weidenkaff, A.
Thermoelectric properties and characterisation of Al-substituted ZnO bulk samples and thin films, Jahrestagung der CH-Physikalischen Gesellschaft, Basel, 06-21 thru 22 ▼

and Nanostructured thermoelectric materials, Bad Honnef, DE, 02-22 thru 24 ▼

Schaeuble, N./Romanyuk, Y./Yoon, S./Weidenkaff, A./Aguirre, M. H.

Aluminium-substituted ZnO thin films: Thermoelectric properties and structural characterisation, European conference on thermoelectricity, Como, IT, 09-22 thru 24 ▼

Shkabko, A./Aguirre, M. H./Weidenkaff, A.
Al/SrTiO₃-xNy/Al Memristors, International Symposium on Integrated Functionalities (ISIF), San Juan, PR, US, 06-13 ◆◆

Shkabko, A./Populoh, S./Weidenkaff, A.
Functional perovskites for energy technologies/Materials Days., Rostock, DE, 09-16 ◆◆

Trottmann, M./Populoh, S./Weidenkaff, A.
Nanostructured Nb substituted CaMnO₃ n-type thermoelectric Material prepared by Ultrasonic Spray Combustion; ECT 2010, Como, IT, 10-22 thru 24 ◆

Trottmann, M./Suter, C./Weidenkaff, A.
Thermoelectric system for waste heat recovery in Cars, 2010 MRS Spring meeting, San Francisco, US, 04-05 thru 09 ◆

Ulrich, A./Emmenegger, L./Wichser, A./Honnegger, P./Stilli, J./Kumar, S. M./Ferri, D./Bach, C./Winkler, A.
The tracer study to assess the effect of lubrication oil and fuel on catalyst aging for different combustion techniques, oil and fuel types, 14th ETH-Conference on Combustion Generated Nanoparticles, Helsinki, DK, 08-01 thru 04 ◆

Vilboux, D./Populoh, S./Shkabko, A./Weidenkaff, A.
The floating zone method for thermoelectric materials processing, GDR thermoelectricite 2010, Grenoble, FR, 07-06 thru 07 ◆

Weidenkaff, A.
Symp. On Thermoelectricity, Gordons Conference, Colby College, Colby, US, 07-18 thru 21 ◆◆

Symposium on Functional Oxides, Materials Research Society Spring Meeting, MRS, San Francisco, US, 04-05 thru 09 ◆◆

Verstromung von Abgaswärme, 2nd conf on thermoelectricity: Thermoelectricity goes Automotive, Berlin, DE, 12-8 thru 10 ◆◆◆

Weidenkaff, A./Trottmann, M.
Ceramic thermoelectric converters, Heraeus-Seminar on Nanostructured Thermoelectric Materials, Physikzentrum Bad Honnef, DE, 02-21 thru 24 ◆◆

Development of perovskite-type materials for thermoelectric converters, Physics of New Materials in honor of Prof. Bertram Batlogg, ETH Zurich, 08-23 thru 25 ◆◆

Development of perovskite-type oxides and oxynitrides for thermoelectric solar converters, MRS spring meeting, San Francisco, US, 04-05 thru 09 ◆◆

Functional perovskite-type materials for energy technologies, 7th Int. Conf. on Inorganic Materials, Biarritz, FR, 09-11 thru 14 ◆◆

Nanostructured functional oxides, Nanomaterials Processing for Renewable Energy, Paul Scherrer Institut (PSI), 03-04 ◆◆

Thermoelectric converters, ESF Conference Oberurgl, AT, 07-04 thru 08 ◆◆

Thermoelectric materials for Solar Energy Converters,
Int. Conf. on Ceramics ICC3, Osaka, JP, 11-15 thru 18 ♦ ♦

Winkler, A./Ferri, D./Kumar, S. M./Aguirre, M.
Influence of phosphorous aging on automotive catalysts;
Fall Meeting Swiss Chemical Society, Zurich, 09-16 ▼

and 14th Nordic Symposium on Catalysis,
Helsinki, DK, 08-29 thru 31

Winkler, A./Ulrich, A./Emmenegger, L./Ferri, D./, Kumar, S. M./
Stilli, J./Bach, C.
Investigation of the engine oil and biofuel based aging behavior of
catalytic converters,
Euro Oil & Fuel Conference, Krakow, PL, 09-24 thru 26 ♦

Empa's academic activities in 2010

Teaching-Activities

Swiss Federal
Institute of Technology,
Zurich (ETH)

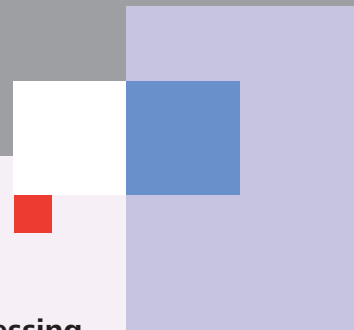
Architecture	Carmeliet, J.	Building Physics; Building Materials
	Derome, D.	Bauphysik 3
	Dorer, V.	Windtunnel and Urban Physics
	Eggenschwiler, K.	Raumakustik
	Moonen, P.	Building Physics and Urban Physics
	Winnefeld, F.	Mineral building materials in: Baustoffe
	Zimmermann, T.	Baustoffkunde I + II: Holz
Biology	Rossi, R.	Thermoregulation
	Thöny-Meyer, L.	Biologie I: Genetik
Chemistry and Applied Biosciences	Ernst, K.-H.	Surface Science in Heterogenous Catalysis
	Ferri, D.	Surface Science and Methods in Catalysis
Civil Engineering	Eggenschwiler, K.	Lärmbekämpfung
	Lothenbach, B.	Chemistry of cement hydration
	Lura, P.	Shrinkage and Cracking of Concrete Werkstoffe I, III, IV
Electrical Engineering	Tiwari, A.	Solar cells
Environmental Sciences	Brunner, D.	Einführung in die Chemie und Physik der Atmosphäre
	Gottschalk, F.	Introduction to decision analysis and game theory
	Hofer, P.	Luftreinhaltung
	Liati, A.	Advanced Geochronology
	Nowack, B.	Gesellschaftlicher Umgang mit Umweltrisiken
Geomatic Engineering	Brunner, A. J.	Werkstoffe III: Kunststoffe im Bauwesen
	Motavalli, M.	Fibre composite material in structural Engineering
	Partl, M.	Bituminous Materials
	Steiger, R.	Holz und Holzwerkstoffe
	Weber, B.	Tragswerksdynamik und Schwingungsprobleme
Humanities; Informatics	Simon, K.	Technik/Farbe des Digitalen Publizierens
Information Technology	Heutschi, K.	Akustik 1 + 2; Akustisches Kolloquium
	Maniura, K.	Mechanobiology: Implications for Development, Regeneration and Tissue Engineering
	Sennhauser, U./ Grossmann, G.	Physik der Ausfälle und Ausfallanalyse elektronischer Schaltungen
	Sennhauser, U./ Held, M.	Zuverlässigkeit von Geräten u. Systemen
Materials Science	Barbezat, M./ Roth, M./Graule, T.	Integrity of Materials and Structures
	Clemens, F.	Advanced Composite and Adaptive Material Systems; Verbundwerkstoffe
	Ernst, K.-H.	Biomineralization
	Graule, T.	Integrity of Materials and Structures; Keramik
	Heuberger, M.	Biomaterial Surfaces; Surfaces and Interfaces
	Jaeger, D./ Patscheider, J.	Praktikum III
	Kübler, J.	Mechanical Properties of Ceramics
	Maniura, K.	Biocompatible Materials I / II
	Patscheider, J.	Functional Surfaces
	Roth, M.	Integrity of materials and structures
	Schmutz, P.	Corrosion and durability of engineering
	Weidenkaff, A.	Solid State Chemistry
Mechanical and Process Engineering	Campanile, L. F.	Aeroelasticity
	Dimopoulos, P.	Abgasnachbehandlung in modernen Dieselmotoren

Swiss Federal Institute of Technology, Zurich (ETH)		Eggenschwiler, K.	Raumakustik
		Hack, E./	Optical Methods in Experimental Mechanics
		Brönnimann, R.	
		Koller, R./	Betriebsfestigkeit
		Guillaume, M.	
		Kovacs, G.	Seilbahnen
		Mazza, E.	Mechanics for Modelling and Simulation
		Terrasi, G.	Bemessen von Kunststoffbauteilen
Swiss Federal Institute of Technology (ETH), Basel Central South University of Changsha, China Centre Henri Tudor, Luxembourg École Polytechnique Fédérale Lausanne (EPF)		Terrasi, G./Clemens, F.	Advanced Composite and Adaptive Material Systems
		Weisse, B.	Structural Design
	Biosystems Science and Engineering	Zinn, M.	Biopolymers; Bioprocesses
	Materials and Mechanical Engineering	Roth, M.	Advanced Materials Technology
	SITec	Zimmermann, M.	Construction & Energy
	Atmospheric Chemistry Modelling	Reimann, St.	Measurements of air pollutants
	Construction Materials	Lothenbach, B.	Thermodynamic modelling
		Lura, P.	Early Age properties
	EDME	Balic, E./Michler, J.	Mechanics of Thin Films
	EDMX	Hoffmann, P./Utke, I.	Nanofabrication with FEB and FIB
	Materialwissenschaften	Nüesch, F. A.	Organic Semiconductors
		Michler, J.	Thin Film Mechanics
	Mechanical Engineering	Vaucher, S./	Materials Selection
		Michler, J./ Wasmer, K.	
	Microtechnique (SMT)	Hoffmann, P.	Chimie des Surfaces; Laser Micro-machining
	Science et Génie des Matériaux	Lüthi, Th.	Non-destructive Evaluation Methods
Haramaya University, Ethiopia	Department of agricultural economics	Gmünder, S.	Introduction to Life Cycle Assessment
		Loser, R.	Mineralische Baustoffe
Montan University, Leoben, (AT)	Allgemeine, analytische und physikalische Chemie	Rösslein, M.	Mess- und Ergebnisunsicherheit; Prozessanalytik und Prozessfähigkeit
Sokoine University of Agriculture, Tanzania	Department of agricultural economics	Gmünder, S.	Introduction to Life Cycle Assessment
Sveriges Största Tekniska Universitet (KTH), Stockholm (SE)	Strassenbau	Partl, M.	Advanced Pavement Engineering; Advanced Rheology
Technical College TSH Pfäffikon		Partl, M.	Baustoffkunde
Technische Universität Freiberg (DE)	Verfahrens- und Umwelttechnik	Graule, T.	Nano- und Biokeramik
Technische Universität Graz (AT)	Timber engineering	Richter, K.	Gluing Technology
Technische Universität Kaiserslautern (DE)	Maschinenbau & Verfahrenstechnik	Leinenbach, Ch.	Metallische Hochleistungswerkstoffe
Technische Universität München (DE)	Lehrstuhl für Bauklimatik und Haustechnik	Zimmermann, M.	Energiekonzept Forum Chriesbach
	Wissenschaftszentrum Weihenstephan	Jacob, P.	Einführung in die Rasterelektronenmikroskopie
Technische Universität Warschau (PL)	Werkstoffwissenschaften	Janczak-Rusch, J.	Joining Materials
UNIS, (NO)	Arctic Technology	Reimann, St.	Measurements of air pollutants within the Arctic environment
Universidad Pontificia Bolivariana	Environmental science	Gmünder, S.	Introduction to Life Cycle Assessment
Universidade Federal do Paraná	Environmental science	Reinhard, J.	Consequential Life Cycle Assessment
Universität Augsburg (DE)	Chemie	Weidenkaff, A.	Renewable Energy
Universität Freiburg im Breisgau (DE)	Fakultät für Chemie, Pharmazie und Geowissenschaften für Geowissenschaften	Vogt, U.	Keramische Materialien für Energie und Ressourcen; Modern Ceramics, Cements, and Glasses
Universität Freiburg im Breisgau (DE)	Forest Sciences	Schubert, M.	Dendrologie
		Schwarze, F.	Holzpathologie; Holzschutz I + II
Universität Fribourg	Umweltwissenschaften	Züttel, A.	Ressourcen
Universität Graz (AZ)	Institute für Systemwissenschaften	Knöri, C.	Qualitative Systemwissenschaften
Université Joseph Fourier, Grenoble (FR)	ESONN'2010', Grenoble	Hug, H.- J.	Scanning Probe Microscopy

University Loughborough (UK)	CREST	Tiwari, A.	Solar cells
University of Applied Sciences Berne, Biel	Automobilindustrie; Elektrotechnik	Wasmer, K.	Chemie und Werkstoffe 2 + 3
University of Applied Sciences Chur, HTW	Bau und Gestaltung	Weber, A.	Bauphysik
University of Applied Sciences, Dornbirn (AT)	Master in Mikro- und Nanotechnologie der Euregio Bodensee	Gottschalk, F.	Nanotox
		Patscheider, J.	PVD technologies
		Wick, P./Hirsch, C./Thurnherr, T.	Nano (Öko)toxikologie
University of Applied Sciences, Horw	Bautechnik	Piskoty, G.	Metallische Werkstoffe
University of Applied Sciences and Arts, Lucerne		Krajci, L.	Bauphysik und Baustoffe
	Bautechnik	Loser, R.	Bachelor in Bautechnik, Vorlesung Baustoffe, Teil Beton und Bindemittel
	Civil Engineering	Frank, Th./Ghazi Wakili, K./Hugi, E.	Fassaden- und Metallbausysteme
	Dept. HVAC	Dorer, V.	Natural Ventilation and Passive Cooling
	Technics & Architecture	Hugi, E.	Prüfen und Klassifizieren
University of Applied Sciences, Rapperswil	Mechanical Engineering	Weilenmann, M.	Messtechnik
University of Applied Sciences, Sion		Zinn, M.	Biomaterials
University of Applied Sciences, St.Gallen	Technik	Gauch, M./Hischier, R./Wäger, P.	Umwelt- und Ressourcenmanagement
University of Applied Sciences Wädenswil, ZHAW	ICBC	Nagel, M.	Industrielle Chemie II, Makromolekulare Chemie
	Biotechnology	Buchmann, B.	Air Pollution
	Lifescience	Ihssen, J.	Escherichia coli - the working horse of biotechnology
		Richter, M.	Biocatalysis
		Hischier, R.	Ökologie
University of Applied Sciences for the graphic industry, Wallisellen			
University of Applied Sciences Winterthur, ZHAW		Zinn, M.	Natürliche Biopolymere
	ICBC	Wick, P./Hirsch, C./Thurnherr, T.	Biomaterialien
	Mechanical Engineering	Koebel, M.	Chemistry for engineers
	Verfahrenstechnik	Clemens, F.	Funktionsmaterialien
University of Applied Sciences, Yverdon	Institute of Micro- and Nano-Sciences	Graule, T./de Hazan, Y.	Nanopowders and Nanocomposites
University of Applied Sciences, Zürich	Civil Engineering	Loser, R.	Mineralische Baustoffe
		Raab, C.	Materialtechnologie Asphalt und Bitumen
		Zimmermann, T.	Materialtechnologie Holz
University of Basel	Institut für Physik	Hug, H.- J.	Physik III
	Umweltwissenschaften	Reimann, St.	Umweltsystem Atmosphäre: Luftverschmutzung und Klimaerwärmung
University of Bern	Chemie	Weidenkaff, A.	Materials for future energy technologies
		Fasel, R.	Introduction to the physics and chemistry of surfaces
		Meyer, V.	Chromatographic Analysis; Measurement Uncertainty
	Oeschger-Center	Krug, H./Wick, P./Hirsch, C./Thurnherr, T.	Climate and Air Pollutants
University of Maryland, NIST	Chemistry and Biochemistry	Rösslein, M.	Measurement Uncertainty
University of Tehran	Faculty of Civil Engineering	Motavalli, M.	Application of Polymer Composite Materials in Structural Engineering
University of the Arts, Zurich	Music	Heutschi, K.	Audiotechnik
University of Zurich	Chemistry	Ernst, K.-H.	Chemical Processes at Solid Surfaces
	Ur- und Frühgeschichte	Senn, M.	Alpine Rohstoffe: Gold
		Hilty, L.	Informatikvorlesungen, spezielle Themen
Vrije Universiteit Amsterdam (NL)	Physics	Züttel, A.	Hydrogen Science and Technology

Empa's academic activities in 2010

PHD Theses



Acoustics / Noise Control

Awietjan, Stefan Filip
[Manufacture, structure and properties of magnetorheological elastomers](#)
Co-Supervisor Empa: Dr Stanislaw Pietrzko
Int. PhD School CH-PL ▼ ◆

Churchill, Claire
[Direct and Flanking Transmission in Combined Heavyweight and Lightweight Structures](#)
Co-Supervisor Empa: Dr Lubos Krajci
University of Liverpool (UK) ◆

Advanced Fibers

Chatterjee, Sanjukta
[Structural and mechanical effects of carbon nanotubes in polymer fibers](#)
Co-Supervisor Empa: Dr Rudolf Hufenus, Dr Frank Nüesch
Uppsala University, (SE) ◆

Guex, Anne G  r  ldine
[Electrospun scaffolds for contractile artificial muscle constructs for cardiac repair](#)
Co-Supervisor Empa: Dr Giuseppino Fortunato
University of Bern ◆

Salimova, Viktoriya
[Pyrolysis Chemistry of Cellulose in the Presence of Phosphorus and Synergistic Additives](#)
Co-Supervisor Empa: Dr Manfred Heuberger, Dr Sabyasachi Gaan
ETH Zurich, Dep. Chemistry and Applied Biosciences ▼

Schurtenberger, Erich
[Thermodynamics of Confined Fluids](#)
Co-Supervisor Empa: Dr Manfred Heuberger
ETH Zurich, Dept. of Materials ◆

Advanced Materials Processing

Afra, Bamdad
[Focused electron beam induced processing](#)
Supervisor Empa: Prof Patrik Hoffmann
EPF Lausanne, Materials Science and Engineering ◆

Bernau, Laurent
[Mikromechanik von DNA-Molek  len](#)
Supervisor Empa: Dr Patrik Hoffmann
Co-Supervisor Empa: Dr Ivo Utke
EPF Lausanne ▼

Dabirian, Ali
[Combinatorial High-Vacuum Chemical Vapor Deposition of Lithium Niobate Thin Films](#)
Supervisor Empa: Prof Patrik Hoffmann
EPF Lausanne, Photonics ▼

Luo, Lu
[Precursor evaporation and transport in transitino regime for HVCVD applications](#)
Supervisor Empa: Prof Patrik Hoffmann
EPF Lausanne, Materials Science and Engineering ◆

Wang, Li
[Nanostructuring by self assembly of coploymer blends](#)
Supervisor Empa: Prof Patrik Hoffmann
EPF Lausanne, Materials Science and Engineering ◆

Air Pollution / Environmental Technology

Bond, Steven
[Sources and Sinks of Hydrogen in the Atmosphere](#)
Co-Supervisor Empa: Dr Stefan Reimann, Dr Martin Vollmer, Dr Martin Steinbacher
ETH Zurich, Dept. Chemistry and Applied Biosciences ▼

Gianini, Matthias
[Quellenzuordnungen von Aerosolen aus der Verbrennung von Biomasse](#)
Co-Supervisor Empa: Dr Christoph H  glin
ETH Zurich Institute for Atmospheric and Climate Science ◆

Keller, Christoph

[Assessment of European emissions of non-CO₂ greenhouse gases](#)

Co-Supervisor Empa: Dr Stefan Reimann/Dr Dominik Brunner

ETH Zurich Institute for Atmospheric and Climate Science ◆

Knote, Christoph

[Regional scale impacts of changing emissions on air quality and climate](#)

Co-Supervisor Empa: Dr Dominik Brunner

ETH Zurich Institute for Atmospheric and Climate Science ◆

Roisin, Walsh

[High Frequency Observations and Analysis of OVOCs](#)

Co-Supervisor Empa: Dr Stefan Reimann

University of Bristol (UK) ▼

Schrade, Sabine

[Emissions of PM₁₀ and Ammonia from open bovine barns](#)

Co-Supervisor Empa: Dr Lukas Emmenegger

Christian-Albrechts-University of Kiel ▼

Zhou, Yipin

[Satellite Cartography of Air Quality over Switzerland](#)

Co-Supervisor Empa: Dr Dominik Brunner

ETH Zurich Institute for Atmospheric and Climate Science ▼

Analytical Chemistry

Favre-Bulle, Joanne

[Diagenetic evolution and mineral composition of Fe/Mn layers in the sediments of Lake Baikal](#)

Co-Supervisor Empa: Dr Andrea Ulrich

ETH Zurich ◆

Hagendorfer, Harald

[Emission processes of nanoparticles at material-environment-interface](#)

Co-Supervisor Empa: Dr Andrea Ulrich

EPF Lausanne ◆

Müller, Claudia

[Perfluorinated Chemicals nPFCs from Materials in the Environment](#)

Co-Supervisor Empa: Dr Andreas C. Gerecke

ETH Zurich ◆

Ott, Naomi

[A novel micro-analytical technique for elemental, locally and time resolved in-situ investigations](#)

Co-Supervisor Empa: Dr Andrea Ulrich

University of Bern ◆

Biomaterials

Follonier, Stéphanie

[Global gene expression and physiological state of PHA-producing *P. putida*](#)

Co-Supervisor Empa: Dr Manfred Zinn

ETH Zurich, Dept. of Mechanical and Process Engineering ◆

Gattlen, Jasmin

[Reproducible biofilm formation](#)

Co-Supervisor Empa: Dr Manfred Zinn, Dr Laurie Mauclair,

University of Zurich, Dept. Microbiology ◆

Ketikidis, Pantelis

[Interfacial behavior of biocompatible poly\(hydroxyalkanoate\)-based polymers](#)

Co-Supervisor Empa: Dr Manfred Zinn

University of Basel, Dept. of Chemistry ◆

Le Meur, Sylvaine

[Production of polyhydroxyalkanoates \(PHAs\) from cheap waste resources](#)

Co-Supervisor Empa: Dr Qun Ren, Dr Manfred Zinn

ETH Zurich, Dept. Umweltwissenschaften (UWIS) ◆

Müller, Christian

[Sensor development for an implantable drug monitoring chip](#)

Supervisor Empa: Dr Linda Thöny-Meyer

Co-Supervisor Empa: Dr Michael Fairhead

ETH Zurich, Dept. Chemistry and Applied Biosciences ◆

Building Science and Technology

Allegrini, Jonas

[Urban climate](#)

Supervisor Empa: Prof Jan Carmeliet

Co-Supervisor Empa: Viktor Dorer

ETH Zurich, Dept. Bau, Umwelt und Geomatik ◆

Derluyn, Hannelore

[Salt crystallisation in porous media](#)

Supervisor Empa: Prof Jan Carmeliet

ETH Zurich, Dept. Bau, Umwelt und Geomatik ◆

Goto, Yutaka

[Sustainable building envelopes for Japan](#)

Co-Supervisor Empa: Dr Karim Ghazi Wakili

ETH Zurich, Dept. Bau, Umwelt und Geomatik ◆

Patera, Alessandra

[4D experimental investigation of hygro-mechanical behaviour of wood at the cellular scale](#)

Supervisor Empa: Prof Jan Carmeliet

Co-Supervisor Empa: Dr Michele Griffa

ETH Zurich, Dept. Bau, Umwelt und Geomatik ◆

Paterna, Enrico

[Urban climate modelling](#)

Supervisor Empa: Prof Jan Carmeliet

Co-Supervisor Empa: Dr Peter Moonen

ETH Zurich, Dept. Bau, Umwelt und Geomatik ◆

Saneinejad, Saba

[Urban climate](#)

Supervisor Empa: Prof Jan Carmeliet

Co-Supervisor Empa: Dr Peter Moonen

ETH Zurich, Dept. Bau, Umwelt und Geomatik ◆

Center for Synergetic Structures

Rampf, Markus

[Sich selbst reparierende Membranen für pneumatische Strukturen](#)

Supervisor Empa: Prof Edoardo Mazza

Co-Supervisor Empa: Dr Rolf Luchsinger

ETH Zurich, Dept. of Mechanical and Process Engineering ◆

Concrete / Construction Chemistry

Deschner, Florian

[Enhancing the reactivity of Portland fly ash cement](#)

Co-Supervisor Empa: Dr Frank Winnefeld, Dr Barbara Lothenbach

Universität Erlangen (DE) ◆

Dilnesa, Belay

[Fate of iron during hydration of cement](#)

Co-Supervisor Empa: Dr Barbara Lothenbach

EPF Lausanne ◆

Ferrari, Lucia

[Cement superplasticizer interaction studied by atomic force microscopy](#)

Co-Supervisor Empa: Dr Josef Kaufmann, Dr Frank Winnefeld

Technische Universität München (DE) ◆

Hôpital, Emilie

[Al uptake in C-S-H and the influence of alkali](#)

Co-Supervisor Empa: Dr Barbara Lothenbach

EPF Lausanne ◆

Kunther, Wolfgang

[Sulfatresistenz Resistance against sulfate attack](#)

Co-Supervisor Empa: Dr Barbara Lothenbach, Dr Andreas Leemann

EPF Lausanne ◆

Corrosion and Materials Integrity

Breimesser, Matthias

[Elektrochemische Rauschanalyse von lokalen](#)

[Korrosionsprozessen](#)

Co-Supervisor Empa: Dr Patrik Schmutz, Dr Thomas Suter

Universität Erlangen (DE) ◆

Pawelkiewicz, Magdalena

[Unified description of mass transport and reactions in lead-free solder joints](#)

Co-Supervisor Empa: Dr Patrik Schmutz

Int. PhD School CH-PL ▼

Ura, Ewa

[CorQuasi: Corrosion and passivation mechanisms of](#)

[Quasycrystalline approximants](#)

Co-Supervisor Empa: Dr Patrik Schmutz

Int. PhD School CH-PL ▼

Electronics / Metrology / Reliability

Iwaniuk, Daniel

[Adaptive control of laser speckle fields in microscopy](#)

Co-Supervisor Empa: Dr Erwin Hack

EPF Lausanne, Civil and Environmental Engineering ◆

Lotito, Valeria

[SNOM](#)

Supervisor Empa: Prof Gian-Luca Bona

Co-Supervisor Empa: Dr Urs Sennhauser

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

Mooser, René

[6D-deformation analysis from CT data sets](#)

Co-Supervisor Empa: Dr Urs Sennhauser

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

Sanabria, Sergio

[US Glued Timber](#)

Co-Supervisor Empa: Dr Urs Sennhauser, Dr Jürg Neuenschwander

ETH Zurich, Inst. for Building Materials ◆

Scholder, Olivier

[Platun](#)

Supervisor Empa: Prof Gian-Luca Bona

Co-Supervisor Empa: Dr Urs Sennhauser

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

Zraggen, Eugen

[Photonik Projekt](#)

Supervisor Empa: Prof Gian-Luca Bona

Co-Supervisor Empa: Dr Urs Sennhauser

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

Functional Polymers

Chatterjee, Sanjukta

[Structural and mechanical effects of carbon nanotubes in polymer fibers](#)

Co-Supervisor Empa: Dr Rudolf Hufenus, Dr Frank Nüesch
Uppsala University, (SE) ◆

Fan, Bin

[Cyanine Dyes for solar cell applications](#)

Co-Supervisor Empa: Dr Roland Hany
EPF Lausanne ▼

Kuster, Simon

[Structure-property relationship in single, double and multi squaraine dye unit systems](#)

Co-Supervisor Empa: Dr Thomas Geiger
ETH Zurich, Dept Chemie und angewandte Biowissenschaften ▼

Molberg, Martin

[Silicone-Composite for Low-Voltage Dielectric Elastomer Actuator](#)

Co-Supervisor Empa: Dr Christiane Löwe
EPF Lausanne, Laboratory of Composites and Polymer Technology
▼

Shaw-Stewart, James

[Laser ablation forward transfer](#)

Co-Supervisor Empa: Dr Frank Nüesch
ETH Zurich ◆

Tisserant, Jean-Nicolas

[Structured Templates of PCBM for Applications in Photovoltaics and Photonics](#)

Co-Supervisor Empa: Dr Jakob Heier, Dr Roland Hany
ETH Zurich ◆

High Performance Ceramics

Bora, Debajeet Kumar

[Synthesis and assessment of mixed metal-oxide nanoparticles and films](#)

Co-Supervisor Empa: Dr Artur Braun
University of Basel ◆

Castillo, Nikolaos

[Photocatalytic cleaning and sterilisation applications](#)

Co-Supervisor Empa: Prof Thomas Graule
EPF Lausanne ▼

Chen, Qianli

[Effect of lattice volume and imperfections on the proton-photon](#)

Co-Supervisor Empa: Dr Artur Braun
ETH Zurich/EPF Lausanne ◆

Erat, Selma

[Investigation of the driving forces of metal-insulator transitions in LaSrFeNi-oxides](#)

Co-Supervisor Empa: Dr Artur Braun
ETH Zurich ▼

Flak, Dorota

[New metal oxide nanopowders for gas sensors](#)

Co-Supervisor Empa: Prof Thomas Graule
AGH University of Science and Technology, Cracow, PL ◆

Heinecke, Judit

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