

nanoGe Fall Meeting 2018 (FallMeeting18)

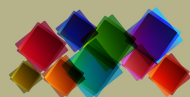
S10 Scanning Probe Microscopy for Energy Applications

Torremolinos, Spain, 2018 October 25th - 26th

Conference Chairs: Sascha Sadewasser and Rüdiger Berger

Conference Program

October 25th - Day 4 (Thursday)	
	Plenary Session 5 Chair: Daniel Vanmaekelbergh Room: Torremolinos AB
09:00 - 09:30 5-K1	<u>Maksym Kovalenko</u> (<i>Institute of Inorganic Chemistry, Department of Chemistry and Applied Bioscience, ETH Zurich, 8093 Zurich, Switzerland</i>) Colloidal Nanocrystals of APbX ₃ Perovskites [A=Cs ⁺ , CH(NH ₂) ₂ ⁺ , X=Cl ⁻ , Br ⁻ , I ⁻]: Surface Chemistry, Self-Assembly and Potential Applications
	SPMEn S10.1 Chair: Sascha Sadewasser Room: Torremolinos C
09:00 - 09:15 S10.1-O1	<u>Nicoleta Nicoara</u> (<i>International Iberian Nanotechnology Laboratory, 4715-330 Braga, Portugal</i>), Roby Manaligod, Philip Jackson, Dimitrios Hariskos, Wolfram Witte, Sascha Sadewasser Impact of Alkali post Deposition Treatments on the Grain Boundary Properties in Cu(In,Ga)Se ₂
09:15 - 09:45 S10.1-I1	<u>Stefan A.L. Weber</u> (<i>Max Planck Institute For Polymer Research</i>), Ilka Hermes, Anders Hagfeldt, Michael Graetzel, Wolfgang Tress, Rüdiger Berger Watching Ions Move: Scanning Probe Microscopy on Perovskite Solar Cells
09:45 - 10:00 S10.1-O2	<u>Rüdiger Berger</u> (<i>MPI for Polymer Research, Ackermannweg 10, 55128 Mainz, Germany</i>), Alexander Klasen, Stefan Weber, Ilka Hermes, Wolfgang Tremel, Ewald Johannes, Amelie Axt, Phillip Baumli Local Current Imaging through TiO ₂ Thin Films
10:00 - 10:30 S10.1-I2	<u>Philippe LECLERE</u> (<i>University of Mons (UMONS), Laboratory for Chemistry of Novel Materials, Center for Innovation and Research in Materials and Polymers (CIRMAP), Mons (Belgium)</i>) Light on Organic and Hybrid Photovoltaic Devices : The Key Role of Scanning Probe Microscopy
10:30 - 11:00	Coffee Break
	SPMEn S10.2 Chair: Rüdiger Berger Room: Torremolinos C
11:00 - 11:30 S10.2-I1	<u>Benjamin GREVIN</u> (<i>UMR5819 SyMMES CEA-CNRS-UGA CEA-Grenoble INAC/SyMMES 17 rue des Martyrs 38054 GRENOBLE CEDEX 9 FRANCE</i>) Imaging the Photocarrier Dynamics in Organic, Hybrid and Two-Dimensional Photovoltaic Materials by Time-Resolved Kelvin Probe Force Microscopy
11:30 - 11:45 S10.2-O1	<u>Jan-Frederik Heger</u> (<i>University of Applied Sciences Esslingen, Kanalstrasse 33, 73728 Esslingen, Germany</i>), Matthias Simolka, Arnulf Latz, Volker Schmidt, Renate Hiesgen AFM Based 3D-Modeling of a Fuel Cell Electrode
11:45 - 12:00 S10.2-O2	Johanna Eichhorn, <u>Francesca Maria Toma</u> (<i>Chemical Sciences Division, Lawrence Berkeley National Laboratory, Berkeley, California 94720, United States</i>) Nanoscale Imaging of Charge Carrier Transport in Water Splitting Photoanodes
12:00 - 12:30	
12:30 - 14:30	Lunch



SPMEn S10.3

Room: Torremolinos C

14:30 - 15:00	<u>Christian Teichert</u> (<i>Montanuniversitaet Leoben</i>)
S10.3-I1	Advanced AFM Techniques to Study Photoconductivity of Inorganic and Organic Semiconductor Nanostructures
15:00 - 15:15	<u>Matthias Simolka</u> (<i>University of Applied Sciences Esslingen, Kanalstrasse 33, 73728 Esslingen, Germany</i>),
S10.3-O1	Christopher Heim, K. Andreas Friedrich, Renate Hiesgen Local Analysis of Li-ion Concentration and Diffusion-Migration Coefficients in Lithium-Silicon Electrodes
15:15 - 15:45	Sara Freund, Antoine Hinaut, Edwin C. Constable, Ernst Meyer, Catherine Housecroft, <u>Thilo Glatzel</u> (<i>Department</i>
S10.3-I2	<i>of Physics, University of Basel, Switzerland</i>) Dye Precursor Molecules on NiO(001) Studied by Non-Contact Atomic Force Microscopy
15:45 - 16:15	<u>Gunther Wittstock</u> (<i>Carl von Ossietzky University of Oldenburg</i>)
S10.3-I3	Scanning Electrochemical Microscopy of Energy Materials
16:15 - 16:30	<u>Elisa Palacios-Lidón</u> (<i>Universidad de Murcia</i>), Emin Istif, Ana Benito, Wolfgang K. Maser, Jaime Colchero
S10.3-O2	Nanoscale Photogenerated Charge-Transfer Study of P3HT Nanoparticles /Graphene Oxide Complexes.
16:30 - 17:00	<u>Anders Mikkelsen</u> (<i>Lund University, Department of Physics & NanoLund, Lund, Sweden</i>)
S10.3-I4	Atomic Scale Surface and Crystal Phase Control in Nanowires for Novel Electronics and Photonics.
17:30 - 19:00	Poster session

October 26th - Day 5 (Friday)

Plenary session 6

Chair: Sascha Sadewasser
Room: Torremolinos AB

09:00 - 09:30	<u>Marina Leite</u> (<i>University of Maryland</i>)
6-K1	Probing Solar Cells at the Nanoscale through Real-Time Functional Imaging