

nanoGe Fall Meeting 2018 (FallMeeting18)

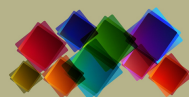
S10 Scanning Probe Microscopy for Energy Applications

Torremolinos, Spain, 2018 October 25th - 26th

Conference Chairs: Sascha Sadewasser and Rüdiger Berger

Conference Program

October 25th - Day 4 (Thursday)	
<p>Plenary Session 5 Chair: Daniel Vanmaekelbergh Room: Torremolinos AB</p>	
09:00 - 09:30 5-K1	<p><u>Maksym Kovalenko</u> (<i>Institute of Inorganic Chemistry, Department of Chemistry and Applied Bioscience, ETH Zurich, 8093 Zurich, Switzerland</i>) Colloidal Nanocrystals of APbX₃ Perovskites [A=Cs⁺, CH(NH₂)₂⁺, X=Cl⁻, Br⁻, I⁻]: Surface Chemistry, Self-Assembly and Potential Applications</p>
<p>SPMEn S10.1 Chair: Sascha Sadewasser Room: Torremolinos C</p>	
09:00 - 09:15	
09:15 - 09:45 S10.1-11	<p><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</p>
09:45 - 10:00	
10:00 - 10:30 S10.1-12	<p><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</p>
10:30 - 11:00	<p>Coffee Break</p>
<p>SPMEn S10.2 Chair: Rüdiger Berger Room: Torremolinos C</p>	
11:00 - 11:30 S10.2-11	<p><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</p>
11:30 - 11:45 S10.2-01	<p><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</p>
11:45 - 12:00 S10.2-02	<p>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</p>
12:00 - 12:15 S10.2-03	<p><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)Se₂</p>
12:15 - 12:30 S10.2-04	<p><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 TiO₂ Thin Films</p>
12:30 - 14:30	<p>Lunch</p>



SPMEn S10.3

Room: Torremolinos C

- 14:30 - 15:00 **Christian Teichert** (*Montanuniversitaet Leoben*)
S10.3-I1 Advanced AFM Techniques to Study Photoconductivity of Inorganic and Organic Semiconductor Nanostructures
- 15:00 - 15:15 **Matthias Simolka** (*University of Applied Sciences Esslingen, Kanalstrasse 33, 73728 Esslingen, Germany*),
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, **Thilo Glatzel** (*Department*
S10.3-I2 *of Physics, University of Basel, Switzerland*)
Dye Precursor Molecules on NiO(001) Studied by Non-Contact Atomic Force Microscopy
- 15:45 - 16:15 **Gunther Wittstock** (*Carl von Ossietzky University of Oldenburg*)
S10.3-I3 Scanning Electrochemical Microscopy of Energy Materials
- 16:15 - 16:30 **Elisa Palacios-Lidón** (*Universidad de Murcia*), 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 **Anders Mikkelsen** (*Lund University, Department of Physics & NanoLund, Lund, Sweden*)
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 **Marina Leite** (*University of Maryland*)
6-K1 Probing Solar Cells at the Nanoscale through Real-Time Functional Imaging