

International Conference

nanoGe September Meeting 2017 (SeptemberMeeting17)

SF2 Solution Processed Innovative Solar Cells

Barcelona, Spain, 2017 September 4th - 6th

Conference Chairs: Emilio Palomares and Garry Rumbles

Conference Program

September 4th - Day 1 (Monday)	
08:00 - 09:30	Registration
09:30 - 09:45	Opening
	SF2.1 Chair: Emilio Palomares
09:45 - 10:20 SF2.1-I1	<u>Paul Burn</u> (<i>The University of Queensland</i>) Interlayer engineering for high Voc perovskite solar cells
10:20 - 10:30	Discussion
10:30 - 11:05 SF2.1-I2	<u>Kai Zhu, Joseph Berry</u> (<i>National Renewable Energy Laboratory Denver</i>) Controlling Solution Chemistry towards Upscaling of Perovskite Photovoltaics
11:05 - 11:15	Discussion
11:15 - 11:45	Coffee Break
11:45 - 12:20 SF2.1-I3	<u>James Durrant</u> (<i>Department of Chemistry, Centre for Plastic Electronics, Imperial College London, UK</i>) Charge carrier kinetics and stability challenges in perovskite solar cells
12:20 - 12:30	Discussion
12:30 - 13:05 SF2.1-I4	<u>James Ryan</u> (<i>National Institute for Materials Science, Japan</i>) Transient optoelectronic studies of inverted perovskite solar cells
13:05 - 13:15	Discussion
13:15 - 15:00	Lunch

SF2.2

Chair: joseph berry

- 15:00 - 15:30
SF2.2-O1 Ivan Mora-Sero (*Institute of Advanced Materials, Universitat Jaume I, Spain*)
Tailoring Properties in Perovskite Solar Cells
- 15:30 - 16:00
SF2.2-O2 Joseph Luther (*National Renewable Energy Laboratory*)
Influence of Electrode Interfaces on the Stability of Perovskite Solar Cells:
Unencapsulated Perovskite Solar Cells for >1000 Hours of Ambient
Operational Stability
- 16:00 - 16:30
SF2.2-O3 Juan Bisquert (*Institute of Advanced Materials, Universitat Jaume I, Spain*)
Optoelectronic impedances of thin film solar cells
- 16:30 - 17:00
SF2.2-O4 Antonio Guerrero (*Institute of Advanced Materials, Universitat Jaume I, Spain*)
Ion Migration in Perovskite Solar Cells

September 5th - Day 2 (Tuesday)

SF2.3

Chair: Annamaria Petrozza

- 09:00 - 09:35
SF2.3-I1 Natalie Stingelin (*Georgia Tech*)
Solution-Processed Photovoltaics: Opportunities provided by Use of Material
Science Tools
- 09:35 - 09:45
Discussion
- 09:45 - 10:20
SF2.3-I2 Juan Luis Delgado (*POLYMAT, University of the Basque Country UPV/EHU, Avenida de Tolosa 72, 20018 Donostia-San Sebastián, Spain.*), Ivet Kosta, Silvia Collavini, Sebastian völker, Hans Grande, Ramón Tena-Zaera, Jorge Pascual
Perovskite:fullerene blend films for halide perovskite solar cells
- 10:20 - 10:30
Discussion
- 10:30 - 11:05
SF2.3-I3 Andrew Ferguson (*National Renewable Energy Laboratory*), Bryon Larson, Bertrand Tremolet de Villers, Ross Larsen
RAMP-ing the discovery of high-performance organic photovoltaic materials
- 11:05 - 11:15
Discussion
- 11:15 - 11:45
Coffee Break
- 11:45 - 12:20
SF2.3-I4 Garry Rumbles (*National Renewable Energy Laboratory Denver*)
Generating Long-lived Charges in Doped Conjugated Polymers: Controlling
Carrier Delocalization

12:20 - 12:30	Discussion
12:30 - 13:05 SF2.3-I5	<u>Karsten Walzer</u> (<i>Heliatek GmbH</i>) Organic Solar Films: From the Lab to the Field
13:05 - 13:15	Discussion
13:15 - 15:00	Lunch
	SF2.4 Chair: Beatriz Martin Garcia
15:00 - 15:35 SF2.4-I1	<u>Annamaria Petrozza</u> (<i>Istituto Italiano di Tecnologia (IIT)</i>) Understanding Defect Physics in Metal-halide Perovskites for Optimizing Optoelectronic Devices
15:35 - 15:45	Discussion
15:45 - 16:20 SF2.4-I2	<u>Hyun Suk Jung</u> (<i>School of Advanced Materials Science & Engineering, Sungkyunkwan University</i>) Exploitation of Nanomaterials and Process for Facilitating Commercialization of Perovskite Solar Cells
16:20 - 16:30	Discussion
16:30 - 16:45 SF2.4-O1	<u>Udayabhaskararao Thumu</u> (<i>1Department of Physics of Complex Systems, Weizmann Institute of Science, Rehovot 76100, Israel.</i>), Miri Kazes, Lothar Houben, Ayelet Teitelboim, Dan Oron Dynamic ligand control of crystalline phase and habit in cesium lead halide nanoparticles
20:00 - 22:00	Social Dinner
September 6th - Day 3 (Wednesday)	
	SF2.5 Chair: Garry Rumbles
09:00 - 09:35 SF2.5-I1	<u>John de Mello</u> (<i>Norwegian University of Science and Technology (NTNU)</i>) Flow-based synthesis of electronic materials
09:35 - 09:45	Discussion
09:45 - 10:20 SF2.5-I2	<u>Michael Chabinyo</u> (<i>Materials, University of California Santa Barbara</i>) Transport and Microstructure in Materials for Solution Processable Solar Cells
10:20 - 10:30	Discussion

10:30 - 11:05 SF2.5-I3	<u>Mario Caironi</u> (<i>Center for Nano Science and Technology@PoliMi, Istituto Italiano di Tecnologia, via Giovanni Pascoli 70/3, I-20133 Milan, Italy</i>) Ion migration effects and photoconductivity in hybrid perovskite optoelectronic devices
11:05 - 11:15	Discussion
11:15 - 11:45	Coffee Break
11:45 - 12:15 SF2.5-O1	<u>Shane Ardo</u> (<i>University of California Irvine</i>), Joseph M. Cardon, Kevin Tkacz, Jacqueline Angsono, Gregory Krueper, Hsiang-Yun Chen Using Electrocatalysis to Overcome Efficiency Bottlenecks in Iodine-Based Dye-Sensitized Solar Cells
12:15 - 12:30 SF2.5-O2	<u>Luis Lanzetta</u> (<i>Imperial College london</i>), Jose Manuel Marin-Belouqui, Irene Sanchez-Molina, Dong Ding, Saif A. Haque Visible Emitting 2D Hybrid Tin Halide Perovskites for Use in Light-Emitting Devices
12:30 - 12:45 SF2.5-O3	<u>Quan Liu</u> (<i>ICFO-Institut de Ciencies Fotoniques, The Barcelona Institute of Science and Technology</i>), Johann Toudert, Silvia Colodrero, Jordi Martorell, Jordi Martorell Two-resonance tapping cavity for broadband light confinement in thin film photovoltaic cells
12:45 - 13:00 SF2.5-O4	<u>Beatriz Martín-García</u> (<i>Istituto Italiano di Tecnologia (IIT)</i>), Yu Bi, Mirko Prato, Davide Spirito, Roman Krahne, Gerasimos Konstantatos, Iwan Moreels PbS QD solar cells with improved stability under ambient conditions through integration of reduced graphene oxide
13:00 - 13:15	
13:15 - 13:25	Closing