

Materials for Sustainable Development Conference (MAT-SUS) (NFM22)

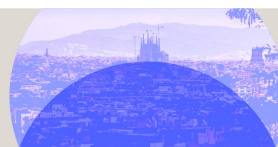
#AppTGT - Application Targets for Next Generation Photovoltaics

Barcelona, Spain, 2022 October 26th - 27th

Conference Chairs: Nasim Zarrabi and Paul Meredith

Conference Program

October 26th - Day 3 (Wednesday)	
08:55 - 09:00	Room A1 - Chair Introduction
	Session 1.1 Chair: Gregory Burwell
09:00 - 09:15 1.1-T1	Li-chung Kin, <u>Tsvetelina Merdzhanova</u> (<i>Forschungszentrum Jülich GmbH, Institut für Energie- und Klimaforschung (IEK-5-Photovoltaik)</i>), Zhifa Liu, Hans Kungl, Sergey Shcherbachenko, Thomas Kirchartz, Rüdiger-A. Eichel, Uwe Rau, Oleksandr Astakhov Highly efficient indoor charging of sodium ion battery with lead halide perovskite under LED lighting
09:15 - 09:30 1.1-T2	<u>Alexander Doolin</u> (<i>SPECIFIC - Swansea University Bay Campus, Fabian Way, Crymlyn Burrows, SA1 8EN Swansea</i>), Rhys Charles, Catherine De Castro, Rodrigo Garcia Rodriguez, Emmanuel Pean, Rahul Patidar, Tom Dunlop, Cecile Charbonneau, Trystan Watson, Matthew Davies Sustainable Solvent Selection for Perovskite Solar Cells
09:30 - 09:45 1.1-T3	<u>Qian Chen</u> (<i>Department of Materials, The University of Manchester</i>), Hongbo Mo, Dong Wang, Andrew Thomas, Richard Curry, Zhu Liu Laser processing for efficient and stable perovskite solar cells
09:45 - 10:00 1.1-T4	<u>Joao Silvano</u> (<i>Imec – Partner in Solliance</i>), Sarallah Hamtaei, Pieter Verding, Bart Vermang, Wim Deferme Investigating the Fabrication of Perovskite Solar Cells by Ultrasonic Spray Coating: A Design of Experiments Approach
10:00 - 10:15 1.1-T5	<u>Jacopo Sala</u> (<i>Hasselt University, Institute for Materials Research, Wetenschapspark 1</i>), Michael Daenen Next Generation Solar Module's Layouts for Improved Operations under Partial Shading
10:15 - 10:30 1.1-T6	<u>Katsushi Fujii</u> (<i>RIKEN Center for Advanced Photonics</i>), Kazuki Koike, Katsuhiko Tsuno, Takeharu Murakami, Atsushi Ogura, Satoshi Wada System and Device Designs for Independent and Self-Controlled Energy Supply System with Solar Cell Energy Source
10:30 - 11:15	Coffee Break
	Session 1.2 Chair: Matt Carnie
11:15 - 11:45 1.2-I1	Sandra Jenatsch, Ravi K. Misra, Ennio L. Comi, <u>Daniele Braga</u> (<i>Fluxim AG</i>), Evelyne Knapp, George Koutsourakis, Fernando Castro, S. Ravi P. Silva, Beat Ruhstaller FEM Simulation for the Quantitative Analysis of Upscaling Losses and Defects in Printed Organic and Perovskite Solar Cells
11:45 - 12:15 1.2-I2	<u>Gregory Burwell</u> (<i>Sustainable Advanced Materials (Sêr-SAM), Department of Physics, Swansea University, Singleton Park, Swansea SA2 8PP, United Kingdom</i>) Scaling and measurement considerations of organic photovoltaics for indoor applications
12:15 - 12:45 1.2-I3	<u>Thomas Österberg</u> (<i>Epishine AB</i>) Laminated Photovoltaics for Indoor PV (IPV) Applications
19:30 - 22:00	Social Dinner



October 27th - Day 4 (Thursday)	
08:55 - 09:00	Room A1 - Chair Introduction
	Session 2.1 Chair: Paul Meredith
09:00 - 09:30 2.1-11	<u>Rene Janssen</u> (<i>Dutch Institute for Fundamental Energy Research, Eindhoven, The Netherlands</i>) Material and Device Design for Multijunction Perovskite Solar Cells
09:30 - 10:00 2.1-12	<u>Jenny Nelson</u> (<i>Department of Physics Imperial College London</i>), Flurin Eisner, Mohammed Azzouzi, Jun Yan, Brian Tam, Phil Sandwell, Benedict Winchester Modelling of materials, devices and systems to optimise integrated photovoltaic applications
10:00 - 10:30 2.1-13	<u>Christoph Brabec</u> (<i>Solar Factory of the Future (SFF), Friedrich-Alexander University Erlangen-Nürnberg (FAU)</i>), Hans-Joachim Egelhaaf, Andreas Distler, Ezgi Nur Güler Solution-Processed Light-Weight and Ultraflexible Organic Solar Cells
10:30 - 11:15	Coffee Break
	Session 2.2 Chair: Ardalan Armin
11:15 - 11:45 2.2-11	<u>Matt Carnie</u> (<i>Faculty of Science and Engineering, Swansea University, Bay Campus, Swansea, SA1 8EN, UK</i>), Krishna Seunarine, Suzanne Thomas, Gethin Thomas, Zaid Haymoor Will Next Generation Photovoltaics Power the Internet of Things?
11:45 - 12:15 2.2-12	<u>Harald Ade</u> (<i>North Carolina State University, Department of Physics</i>) Semi-transparent Organic Solar Cells and Their Potential Use in Greenhouses
12:15 - 12:45 2.2-13	<u>Holger Röhm</u> (<i>Karlsruhe Institute of Technology, Light Technology Institute, Engesserstrasse 13, 76131 Karlsruhe, Germany</i>), Daniel Bahro, Dominik Landerer, Manuel Nöller, Alexander Colsmann Solar Glasses: Integrated semi-transparent photovoltaics for mobile sensor applications
12:45 - 15:25	Lunch
15:25 - 15:30	Room A1 - Chair Introduction
	Session 2.3 Chair: Holger Röhm
15:30 - 16:00 2.3-11	<u>Tavebeh Ameri</u> (<i>Institute for Materials and Processes</i>) Advanced Approaches Applied into Perovskite Photovoltaics for Improved Stability-Performance Balance
16:00 - 16:30 2.3-12	<u>Diego Bagnis</u> (<i>oninn - Centro de inovações</i>), Luiza Correa, Barbara H. Miranda, Adriano Marques, Silvia Fernandes Challenges and Progress of R&D Perovskite PV - from lab-to-fab
16:30 - 16:35	Symposium Closing
17:15 - 17:30	General Closing
17:30 - 20:00	Poster Session

Poster Contribution

325	<u>Elisavet Tatsi</u> (<i>Department of Chemistry, Materials and Chemical Engineering "Giulio Natta", Politecnico di Milano, Piazza Leonardo da Vinci 32, 20133 Milano, Italy</i>), Francesca Corsini, Luca Giacometti Taddei, Alessia Colombo, Chiara Botta, Stefano Turri, Claudia Dragonetti, Gianmarco Griffini Fluorescent methacrylic copolymers for luminescent solar concentrators
335	<u>Cordula Wessendorf</u> (<i>Zentrum für Sonnenenergie- und Wasserstoff-Forschung Baden-Württemberg (ZSW)</i>), Tina Wahl, Johannes Küffner, Thomas Schnabel, Erik Ahlswede Towards Perovskite Solar Modules made by Scalable Printing Methods with Green Solvents