

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

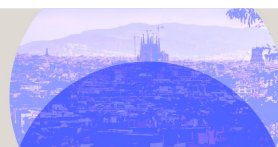
#BRIGHT - Recent Breakthroughs in Organic Photovoltaics

Barcelona, Spain, 2022 October 24th - 27th

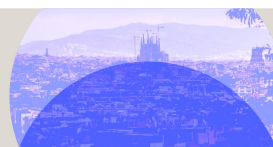
Conference Chairs: Thomas Anthopoulos and Safa Shoaee

Conference Program

October 24th - Day 1 (Monday)	
08:55 - 09:00	Room S11 y S12 - Chair Introduction
	Session 1.1 Chair: Ardalan Armin
09:00 - 09:15 1.1-T1	<u>Dieter Neher</u> (<i>Institute of Physics and Astronomy, University of Potsdam, Karl-Liebknecht-Str. 24-25, D-14476 Potsdam-Golm, Germany</i>), Lorena Perdigon-Toro, Seyed Mehrdad Hosseini, Le Quang Phuong, Yingping Zou, Safa Shoaee Performance Limits of Y-Series Organic Solar Cells: The Invisible Counts
09:15 - 09:30 1.1-T2	<u>Jules Bertrandie</u> (<i>KAUST Solar Center (KSC), Physical Sciences and Engineering Division (PSE), King Abdullah University of Science and Technology (KAUST), Thuwal 23955-6900, Kingdom of Saudi Arabia</i>), Jianhua Han, Catherine S. P. De Castro, Emre Yengel, Julien Gorenflot, Thomas Anthopoulos, Frederic Laquai, Anirudh Sharma, Derya Baran The Energetic Frontiers of Non-Fullerene Organic Solar Cells
09:30 - 09:45 1.1-T3	<u>Uli Würfel</u> (<i>Fraunhofer Institute for Solar Energy Systems ISE, 79110 Freiburg, Germany</i>) Probing the photoluminescence of free charge carriers in organic solar cells: derivation of the quasi Fermi levels
09:45 - 10:00 1.1-T4	<u>Maria Saladina</u> (<i>Institut für Physik, Technische Universität Chemnitz, Chemnitz</i>), Christopher Wöpke, Clemens Göhler, Ivan Ramirez, Xiaoyan Du, Li Nian, Ning Li, Thomas Heumüller, Christoph J. Brabec, Karsten Walzer, Martin Pfeiffer, Carsten Deibel In-Depth Understanding of the Transport Resistance in Organic Solar Cells
10:00 - 10:30 1.1-I1	<u>Pascal Kaienburg</u> (<i>Clarendon Laboratory, Department of Physics, University of Oxford, UK</i>), Moritz Riede All-Small-Molecule Organic Solar Cells - Performance, Electronic & Microstructure Properties
10:30 - 11:15	Coffee Break
	Session 1.2 Chair: Safa Shoaee
11:15 - 11:45 1.2-I1	<u>Frédéric Laquai</u> (<i>KAUST Solar Center, King Abdullah University of Science and Technology, Thuwal, Saudi Arabia.</i>) The Energetic Landscape in Non-fullerene Acceptor Organic Solar Cells Determines the Device Performance
11:45 - 12:15 1.2-I2	<u>Sophia Hayes</u> (<i>Department of Chemistry, University of Cyprus</i>), Kyriaki Koumenidou, Sri Harish Kumar Paleti, Derya Baran, Sotirios Christodoulou, Andreas Othonos, Klyto Katsara, Vassilis Papadakis Dissecting the Role of Molecular Structure and Film Morphology in Photophysical Processes in Ternary Blends of Organic Polymeric Semiconductors with Non-fullerene Acceptors
12:15 - 12:45 1.2-I3	<u>Larry Lueer</u> (<i>Institute of Materials for Electronics and Energy Technology (i-MEET), Friedrich-Alexander-Universität Erlangen-Nürnberg</i>) Optimizing performance and stability of organic photovoltaics with small driving force for charge separation



October 25th - Day 2 (Tuesday)	
08:55 - 09:00	Room S11 y S12 - Chair Introduction
Session 2.1	
Chair: Thomas Anthopoulos	
09:00 - 09:30	<u>Mariano Campoy Quiles</u> (<i>Institut de Ciència de Materials de Barcelona, ICMAB-CSIC Campus UAB</i>)
2.1-11	Rainbow Organic Solar Cells
09:30 - 10:00	<u>Oskar Sandberg</u> (<i>Sustainable Advanced Materials (Sêr-SAM), Department of Physics, Swansea University, Singleton Park, Swansea SA2 8PP, United Kingdom</i>)
2.1-12	What Limits the Charge Collection in Organic Photovoltaic Devices?
10:00 - 10:30	<u>Eva M. Herzig</u> (<i>Dynamics and Structure Formation - Herzig Group, University of Bayreuth, Germany</i>)
2.1-13	Controlling the nanostructure of organic solar cell materials
10:30 - 11:15	Coffee Break
Session 2.2	
Chair: Dieter Neher	
11:15 - 11:45	<u>Ergang Wang</u> (<i>Department of Chemistry and Chemical Engineering, Chalmers University of Technology, SE-412 96 Göteborg, Sweden</i>), Zewdneh Genene, Qiaonan Chen, Jin-Woo Lee, Yunghee Han, Bumjoon Kim
2.2-11	Polymer Acceptors with Flexible Spacers Afford Efficient and Mechanically Robust All-Polymer Solar Cells
11:45 - 12:15	<u>Han Young Woo</u> (<i>Department of Chemistry, College of Science, Korea University, Seoul, 136-713, Republic of Korea</i>)
2.2-12	Nonfullerene Organic Solar Cells as A Green Energy Source
12:15 - 12:45	<u>Thuc-Quyen Nguyen</u> (<i>Center for Polymers and Organic Solids and Department of Chemistry and Biochemistry University of California, Santa Barbara</i>)
2.2-13	High Performing Organic Solar Cells Processed from Green Solvents
12:45 - 15:25	Lunch
15:25 - 15:30	Room S11 y 12 - Chair Introduction
Session 2.3	
Chair: Sophia Hayes	
15:30 - 16:00	<u>Koen Vandewal</u> (<i>Hasselt University, Institute for Materials Research (IMO-IMOMEC)</i>)
2.3-11	Emissive Free Carrier Recombination in Organic Photovoltaics
16:00 - 16:30	<u>Iain McCulloch</u> (<i>Department of Chemistry, University of Oxford, Oxford, UK</i>)
2.3-12	Hydrogen Generation from Organic Semiconductor Nanoparticles
16:30 - 17:00	<u>Diego Bagnis</u> (<i>oninn - Centro de inovações</i>), Luiza Correa, Barbara H. Miranda, Gabriela Amorim
2.3-13	Scale-up challenges OPV for NFA-based devices in commercial applications.
17:00 - 17:05	Symposium Closing
17:15 - 20:00	Poster Session



October 26th - Day 3 (Wednesday)

19:30 - 22:00 **Social Dinner**

October 27th - Day 4 (Thursday)

17:15 - 17:30 **General Closing**

Poster Contribution

224	<u>Doan Vu</u> (<i>Department of Materials Science and Engineering, Monash University, Clayton, Victoria, 3800 Australia</i>), Martyn Jevric, Jonas M. Bjuggren, Chao Wang, Xun Pan, Lars Thomsen, Eliot Gann, Mats R. Andersson, Christopher R. McNeill Reassessing the significance of reduced aggregation and crystallinity of naphthalene diimide-based copolymer acceptors in all-polymer solar cells
287	<u>Qiaonan Chen</u> (<i>Department of Chemistry and Chemical Engineering, Chalmers University of Technology, Sweden.</i>), Ergang Wang Length Effects of Flexible Spacers in Non-Conjugated Polymer Acceptors on Photovoltaic and Mechanical Properties of All-Polymer Solar Cells
321	<u>Manasi Pranav</u> (<i>Soft Matter Physics, Institute of Physics and Astronomy, University of Potsdam, 14476 Germany</i>), Bowen Sun, Safa Shoaee, Dieter Neher Field dependent photoluminescence quenching and free charge generation in low-offset organic solar cells
340	<u>Jingnan Wu</u> (<i>National Engineering Research Center for Colloidal Materials, School of Chemistry & Chemical Engineering, Shandong University</i>), Maojie Zhang, Ergang Wang Non-halogenated Solvent-processed Organic Solar Cell with 18% Efficiency Based on Random Ternary Polymerization Strategy