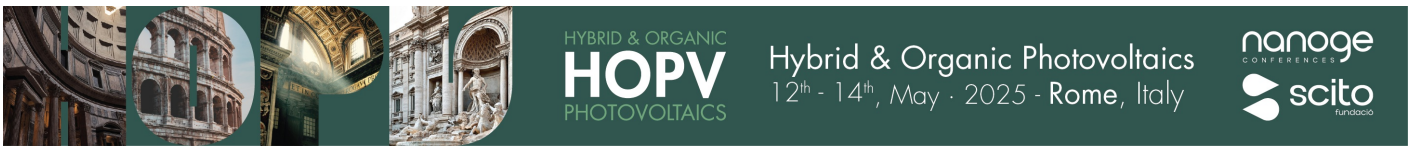


International Conference on Hybrid and Organic Photovoltaics (HOPV25)

Roma, Italy, 2025 May 12th - 14th
Conference organizers: Filippo De Angelis, Francesca Brunetti and Claudia Barolo

Conference Program

May 12th - Day 1 (Monday) 1	
08:15 - 09:00	**Registration**
08:40 - 09:00	**Opening**
	Session 1A
09:00 - 09:30	Michael Graetzel *(Ecole Polytechnique Federale de Lausanne (EPFL))*
1A-K1	-
09:30 - 10:00	Laura Herz *(Department of Physics, University of Oxford, UK)*
1A-K2	Optical Probes of Metal Halide Perovskites for Photovoltaic Applications
10:00 - 10:25	Alex Jen *(Department of Materials Science and Engineering, City University of Hong Kong, Hong Kong SAR, P.R. China)*
1A-I1	Printable Organic and Perovskite Solar Cells for Clean Energy
10:25 - 10:50	Annalisa Bruno *(School of Physical and Mathematical Science & School of Materials Science Engineering & Energy Research Institute @ NTU Nanyang Technological University, 50 Nanyang Avenue, Singapore, 639798 Singapore)*
1A-I2	Enhancing Perovskite Device Performance through Scalable Thermal Evaporation Methods
10:50 - 11:30	**Coffee Break**
	Session 1B1
11:30 - 11:50	Thomas Riedl *(University of Wuppertal, Institute of Electronic Devices and Wuppertal Center for Smart Materials & Systems)*
1B1-IS1	The Stability of Organic Solar Cells in Perovskite/Organic Tandems
11:50 - 12:10	Soo-Jin Moon *(Hanwha QCells, Pangyo R&D center, South Korea)*
1B1-IS2	Perovskite/Si tandem solar cells: From Lab Breakthroughs to Commercialization
12:10 - 12:25	Chu-Chen Chueh *(Department of Chemical Engineering, National Taiwan University, Taiwan)*
1B1-O1	Interface Design for Efficient Organic, Perovskite and Perovskite/Organic Tandem Solar Cells
12:25 - 12:40	Erica Magliano *(CHOSE – Centre for Hybrid and Organic Solar Energy, Department of Electronic Engineering, Tor Vergata University of Rome, via del Politecnico 1, 00133, Rome)*, Francesco Di Giacomo, Harshavardhan Reddy Sathy, Shirin Pourmotlagh, Gemma Giliberti, Giuseppe Ammirati, Francesca Zarotti, Iurie Usatii, Marco Della Noce, Lucia V. Mercaldo, Paola Delli Veneri, Aldo Di Carlo
1B1-O2	Solution-Processed Metal-Oxide Nanoparticles To Prevent The Sputtering Damage In Perovskite-based Tandem Solar Cells
12:40 - 12:55	Philipp Tockhorn *(Helmholtz-Zentrum Berlin for Materials und Energy GmbH, 12489 Berlin, Germany)*, Sebastian Berwig, Yeonghun Yun, Isabella Taupitz, Kevin Prince, Philippe Holzhey, Florian Riesebeck, Stepan Demchyshyn, Christiane Becker, Steve Albrecht
1B1-O3	Reduction of optical and electrical losses in all-perovskite tandem solar cells
12:55 - 13:10	
	Session 1B2
11:30 - 11:50	Antonio Abate *(Helmholtz-Zentrum Berlin)*
1B2-IS1	Tin-Based Perovskite Solar Cells
11:50 - 12:10	Shuzi Hayase *(Infor-Powered Energy System Research Center, The University of Electro-Communications)*
1B2-IS2	Thermal Stability of Sn-based Perovskite Solar Cells
12:10 - 12:25	Linde van de Ven *(NWO-Institute AMOLF, Science Park 104, 1098 XG Amsterdam, The Netherlands)*, Erik Garnett
1B2-O1	Sn-based perovskites from a stable intermediate
12:25 - 12:40	Mahboubeh Hadadian *(Department of Mechanical and Materials Engineering, University of Turku, Vesilinnantie 5, 20500 Turku, Finland)*,
1B2-O2	Elena S. Akulenko, Maryam Esmaeilzadeh, Rustem Nizamov, Kati Miettunen
	Recycling Perovskite Solar Cells: A Green Solution-Based Approach for Reviving Devices
12:40 - 12:55	Daniel Augusto Machado de Alencar *(Department of Chemistry, NIS and INSTM Reference Centre, Università degli Studi di Torino, Via Pietro Giuria 7, Torino, 10125 Italy)*, Giulio Koch, Francesca De Rossi, Amanda Generosi, Giuseppe Ferraro, Matteo Bonomo, Samyuktha
1B2-O3	Noola, Giulia Pellis, Pierluigi Quagliotto, Barbara Paci, Francesca Brunetti, Claudia Barolo
	Towards Eco-conscious Perovskite Solar Cells: Sustainable Material Use, Innovative Synthesis, and Green-Focused Processing
12:55 - 13:10	Lukas Wagner *(Physics of Solar Energy Conversion, Department of Physics, University Marburg, Germany)*, Ian Marius Peters, Annick Anctil,
1B2-O4	Matthew Davies, Jiska de Groot, Li Wang, Robert Pietzcker, Ned Ekins-Daukes, Jan Christoph Goldschmidt
	Paradigm-shifts for sustainable multi-TW photovoltaics
	Session 1B3
11:30 - 11:50	Jan Bruder, Karen Fischer, Jonas Armleder, Alexander Czopiak, Holger Röhm, Alexander Colsmann *(Karlsruhe Institute of Technology, Material Research Center for Energy Systems, Strasse am Forum 7, 76131 Karlsruhe, Germany)*
1B3-IS1	Organic Solar Cells fabricated from Eco-Friendly Nanoparticle Dispersions
11:50 - 12:10	Vida Engmann *(University of Southern Denmark, SDU CAPE)*
1B3-IS2	Vitamins for stable non-fullerene organic solar cells
12:10 - 12:25	Zhaoheng Ling *(KAUST Solar Centre, King Abdullah University of Science & Technology (KAUST), Thuwal, Saudi Arabia)*, Thomas
1B3-O1	Anthopoulos
	20.5 % efficient ternary organic photovoltaics using an asymmetric small-molecular acceptor to manipulate intermolecular packing and reduce energy losses
12:25 - 12:40	FLAVIA RIGHI RIVA *(SpecX-Lab, I.S.M.-C.N.R, Via del Fosso del Cavaliere 100, 00133, Roma, Italy)*, Amanda Generosi, Marco Guaragno,
1B3-O2	Emanuela Mangiacapre, Sergio Brutti, Michael Wagner, Andreas Distler, Hans-Joachim Egelhaaf, Barbara Paci
	Addressing the Stability of Semitransparent Organic Solar Cells via in-situ Investigation of bulk/interface Properties under Stress Conditions
12:40 - 12:55	Lorenzo Catini *(Department of Chemistry, University of Oxford, Oxford, UK)*, Jack Ovens, Luke Hanley, Claudia Tait
1B3-O3	Insights into Charge Transport and Recombination in Organic Solar Cells Through Electrically Detected Magnetic Resonance

12:55 - 13:10 1B3-O4	Julie Euvrard *(Dept. of Physics and Centre for Processable Electronics, Imperial College London, London, SW7 2AZ, UK)*, Oki Gunawan, Antoine Kahn, Barry P. Rand Developing 'gated' photo-Hall effect to characterize photocarrier generation, recombination, and transport in organic semiconductor heterostructures
	Session 1B4
11:30 - 11:50 1B4-IS1	Simona Fantacci *(Consiglio Nazionale delle Ricerche)* 20+ years of calculations on Dye Sensitized Solar Cells
11:50 - 12:10 1B4-IS2	Waldemar Kaiser *(Physics Department, Technical University of Munich)* Structural dynamics at perovskite surfaces: origins of stability and benign electronic properties
12:10 - 12:25 1B4-O1	Virginia Carnevali *(Laboratory of Computational Chemistry and Biochemistry, Institute of Chemical Sciences and Engineering, École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland.)*, Lorenzo Agosta, Vladislav Slama, Nikolaos Lempesis, Andrea Vezzosi, Ursula Rohtlisberger Nanoscale size effects in α-FAPbI3 evinced by large-scale ab initio simulations
12:25 - 12:40 1B4-O2	Andrea Vezzosi *(Ecole Polytechnique Federale de Lausanne (EPFL))*, Virginia Carnevali, Vladislav Slama, Michael Graetzel, Ursula Röthlisberger Computational Insights Into Organic Halide Perovskite Solar Devices Incorporating Electroactive Interlayers
12:40 - 12:55 1B4-O3	Luca Gregori *(Department of Chemistry, Biology and Biotechnology, University of Perugia, via Dell'Elce di Sotto 8, Perugia, 06123, Italy)*, Daniele Meggiolaro, Filippo De Angelis Reducing p-Doping of Tin Halide Perovskites by Trivalent Cation Doping
12:55 - 13:10 1B4-O4	Vladislav Slama *(École Polytechnique Fédérale de Lausanne (EPFL))*, Ghewa Alsabeh, Ursula Röthlisberger, Jovana V. Milic Aryl-Acetylene Layered Hybrid Perovskites in Photovoltaics
13:10 - 15:30	**Lunch Break**
	Session 1C1
15:30 - 15:50 1C1-IS1	Christian Wolff *(STI IEM PVLAB, EPFL)* Towards stable perovskite multijunction solar cells: from nanometer- to wafer-scale
15:50 - 16:10 1C1-IS2	Paola Delli Veneri *(ENEA - Italian National Agency for New Technologies, Energy and Sustainable Economic Development)* From Inorganic to Hybrid and Organic Materials for High-Efficiency and Integrated Photovoltaics
16:10 - 16:25 1C1-O1	Antonio Agresti *(C.H.O.S.E. (Center for Hybrid and Organic Solar Energy), Electronic Engineering Department, University of Rome Tor Vergata, Via del Politecnico 1, 00118, Rome, Italy.)*, Sara Pescetelli, Hanna Pazniak, Alessia Di Vito, Enrico Leonardi, Marina Foti, Emmanuel Kymakis, Aldo Di Carlo Perovskite/Silicon photovoltaic tandem technology: the use of MXenes as a booster for the lab to fab transition
16:25 - 16:40 1C1-O2	Minasadat Heydarian *(Fraunhofer Institute for Solar Energy Systems ISE)*, Kerem Artuk, Maryamsadat Heydarian, Luis Restat, Athira Shaji, Oliver Fischer, Alexander J. Bett, Christoph Messmer, Martin Bivour, Florian Schindler, Martin C. Schubert, Andreas W. Bett, Christian M. Wolff, Juliane Borchert, Patricia S. C. Schulze, Stefan W. Glunz Monolithic Two-Terminal Perovskite/Perovskite/Silicon Triple-Junction Solar Cell with Open Circuit Voltage > 3.0 V
16:40 - 16:55 1C1-O3	Julian Petermann *(Institute of of Microstructure Technology (IMT) at KIT, Eggenstein-Leopoldshaden, Hermann-von-Helmholtz- Platz 1, 76344, Germany)*, Benjamin Hacene, Mohammad Gholipoor, Felix Laufer, Raphael Pesch, Ulrich W. Paetzold Photoluminescence-based imaging method for recombination analysis of perovskite thin films in monolithic tandem solar cells
16:55 - 17:10 1C1-O4	Huyen Tran *(Photovoltaics Research Department, Korea Institute of Energy Research (KIER))*, Inchan Hwang, Junseop Byeon, Sungjun Hong, SeJin Ahn, Kihwan Kim, Jihye Gwak, Inyoung Jeong Reducing open voltage deficit in wide band gap perovskite solar cells by interfacial treatment with 4-fluoro benzyl halides and four-terminal tandem application
	Session 1C2
15:30 - 15:50 1C2-IS1	David Ginger *(Department of Chemistry, University of Washington, Seattle, WA, 98195-1700, USA)* Tailored Interfaces for Operational Stability in Halide Perovskite Solar Cells
15:50 - 16:10 1C2-IS2	Zonglong Zhu *(Department of Chemistry, City University of Hong Kong, Hong Kong SAR, P. R. China)* Advancing Stability in Hybrid and Organic Photovoltaics: Interface Engineering in Halide Perovskites
16:10 - 16:25 1C2-O1	Xiaoming Chang *(KAUST Solar Centre, King Abdullah University of Science & Technology (KAUST), Thuwal, Saudi Arabia)* Solvent-dripping modulated 3D/2D heterostructures for high-performance perovskite solar cells
16:25 - 16:40 1C2-O2	fengning yang *(University of Oxford, Department of Physics, Parks Road, Oxford OX1 3PU, U.K.)* How hole transport layer could affect the mobile ions effect in pin perovskite solar cell
16:40 - 16:55 1C2-O3	Dmitry Muratov *(Department of Chemistry, University of Turin,)*, Danila Saranin, Lev Luchnikov, Son Le Thai, Ekaterina Ilicheva, Irina Chuyko, Polina Sukhorukova Scalable self-assembled monolayers for enhanced performance and stability of inverted perovskite solar cells
16:55 - 17:10 1C2-O4	Francesco Vanin *(Department of Chemistry, City University of Hong Kong)* Elucidating Structure-Function Relationships in Ferrocene-Based Interlayers for High-Performance Perovskite Solar Cells
	Session 1C3
15:30 - 15:50 1C3-IS1	Guillaume Wantz *(Univ. Bordeaux, CNRS, Bordeaux INP, IMS, UMR 5218, F-33400 Talence, France)* Efficient OPV solar cells with simplified device structures
15:50 - 16:10 1C3-IS2	Gregory Welch *(Department of Chemistry, University of Calgary)* New organic dyes and inks for large area roll-coated organic photovoltaics
16:10 - 16:25 1C3-O1	Hua Tang *(Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU))* Strategies to Enhance the Commercial Viability of Organic Solar Cells
16:25 - 16:40 1C3-O2	Giuseppe Ammirati *(CNR-Istituto di Struttura della Materia (CNR-ISM), EuroFEL Support Laboratory (EFSL), Via del Fosso del Cavaliere 100, 00133, Rome, Italy.)*, Stefano Turchini, Francesco Toschi, Patrick O'Keeffe, Alessandra Paladini, Giuseppe Mattioli, Paolo Moras, Polina Sheverdyaeva, Valeria Miliotti, Christoph Brabec, Michael Wagner, Iain McCulloch, Aldo Di Carlo, Daniele Catone Hole Transfer Dynamics and Optoelectronic Properties in PCE10:FOIC Blends for Organic Photovoltaics
16:40 - 16:55 1C3-O3	Jared Faisst *(Fraunhofer Institute for Solar Energy Systems ISE, Germany)*, Mathias List, Clemens Baretzky, Andreas W. Bett, Uli Würfel Implied Voltage and Current Characterization in Organic Solar Cells using Transient Photoluminescence

16:55 - 17:10 1C3-O4	Fiza Arshad *(Korea Research Institute of Chemical Technology (KRICT))*, WON SUK SHIN, CHANG EUN SONG, Taek-soo KIM Wide-Bandgap Polymers with Hydrogen Bonding Moieties Enable Highly-Efficient and Flexible Ternary Organic Solar Cells
	Session 1C4
15:30 - 15:50 1C4-IS1	Mariachiara Pastore *(Laboratoire de Physique et Chimie Théoriques (LPCT) CNRS & Université de Lorraine, Nancy, France)*, Stefano Caramori, Philippe Gros Toward Exploitable Iron Dye-Sensitized Solar Cells?
15:50 - 16:10 1C4-IS2	Edoardo Mosconi *(Computational Laboratory for Hybrid/Organic Photovoltaics (CLHYO), Istituto CNR di Scienze e Tecnologie Chimiche "Giulio Natta" (CNR-SCITEC), Via Elce di Sotto 8, 06123 Perugia, Italy)* Computational Modeling of Perovskite for Photovoltaics and Photocatalysis
16:10 - 16:25 1C4-O1	Filip Ivanovic, Wei-Tao Peng, Samuele Giannini, Jochen Blumberger *(Department of Physics and Astronomy and Thomas Young Centre, University College London, Gower Street, London, WC1E 6BT, UK)* Hybrid exciton-charge transfer states are the gateways for efficient hot exciton dissociation
16:25 - 16:40 1C4-O2	L. R. Franco, Rafael B. Ribeiro, D. Valverde, C. Marchiori, Márcio Varella, Ergang Wang, Ellen Moons, Moyses Araujo *(Department of Engineering and Physics, Karlstad University, 65188 Karlstad, Sweden.)* Effects of Molecular Structure and Disorder on the Photophysics of Polymeric Photovoltaics via Multi-Scale Modeling
16:40 - 16:55 1C4-O3	Alessandro Mattoni *(CNR - Istituto Officina dei Materiali (IOM), Cagliari, Monserrato, 09042 CA, Italy)*, Simone Argiolas, Jgor Pensè Schone, Christian Tantardini Microscopic Mechanisms, Morphology and Defects Formation in the Thermally Activated Crystallization of Methylammonium Lead Iodide
16:55 - 17:10 1C4-O4	Shivani Choudhary *(Indian Institute of Technology Roorkee, India)* Localized Vibrations and Bound Exciton Mediated Emission in 2D Dion–Jacobson Perovskites
17:10 - 17:35	**Break - Room change**
	Session 1D
17:35 - 18:00 1D-I1	Aldo Di Carlo *(ISM-CNR and CHOSE - Centre for Hybrid and Organic Solar Energy, University of Rome ''Tor Vergata'', IT)* -
18:00 - 18:25 1D-I2	Aleksandra Djurisic *(Department of Physics, The University of Hong Kong, Hong Kong)* Photo/electrochemical stability of 2D halide perovskites
18:25 - 18:50 1D-I3	Henry Snaith *(University of Oxford)* -
20:30 - 22:00	**Social dinner**

May 13th - Day 2 (Tuesday) 2

Session 2A

09:00 - 09:30 — Mercouri Kanatzidis *(Northwestern University)*
2A-K1 — Advancing Solar Cells with Halide Perovskites and Perovskitoids

09:30 - 09:35 — Industry talk

09:35 - 10:00 — Annamaria Petrozza *(Center for Nano Science and Technology @Polimi, Istituto Italiano di Tecnologia; Milan, Italy)*
2A-I1 — Structural and electronic properties of lead halide perovskite thin film surfaces

10:00 - 10:25 — Bumjoon Kim *(Korea Advanced Institute of Science and Technology (KAIST))*
2A-I2 — Design of Photoactive Polymers for Intrinsically-Stretchable Polymer Solar Cells

10:25 - 10:50 — Mónica Lira Cantú *(Catalan Institute of Nanoscience and Nanotechnology (ICN2), CSIC and BIST, Campus UAB, Bellaterra, 08193 Barcelona, Spain)*
2A-I3 — The effect of DMA1-XMAXPbI3 /MXene heterojunction in the stability of Perovskite Solar Cells

10:50 - 11:30 — **Coffee Break**

Session 2B1

11:30 - 11:50 — Trystan Watson *(College of Engineering Swansea University)*
2B1-IS1 — Roll-to-Roll Printing of Perovskite Solar Cells: Advances in SAM Deposition via Slot-Die Coating

11:50 - 12:10 — Ji-Youn Seo *(Department of Nano Fusion Technology, Pusan National University, 46241 Busan, Republic of Korea)*
2B1-IS2 — MOLECULAR ENGINEERING APPROACHES TO PEROVSKITE

12:10 - 12:25 — Georgia Gkouzia *(TNO – Netherlands Organization for Applied Scientific Research, High Tech Campus 21, 5656 AE Eindhoven, The Netherlands)*, Anuja Vijayan, Harrie Gorter, Thomas Exlager, Hero't Mannetje, Marcel Simor, Wiljan Verhees, Dorrit Roosen-Melsen, Herbert Lifka, Gayathri Mathiazhagan, Sjoerd Veenstra, Ilker Dogan
2B1-O1 — Scalable fabrication of flexible perovskite solar cells using roll-to-roll processing on In-free transparent conductive oxides

12:25 - 12:40 — Maurizio Stefanelli *(Department of Electronic Engineering, C.H.O.S.E. (Centre for Hybrid and Organic Solar Energy), University of Rome "Tor Vergata", via del Politecnico 1, Rome 00133, Italy)*, Angelo Lembo, Luigi Vesce, Aldo Di Carlo
2B1-O2 — Porphyrin-based additives for ambient-air fabricated Cs-FAPI perovskite modules above 22% efficiency

12:40 - 12:55 — Dumitru Sirbu *(Power Roll Ltd)*, Farshad Jafarzadeh, Nathan Hill, Jazib Ali, Tamil Velusamy, Christopher Wood, Caitlin Woolley, Balder Nieto, Trevor McArdle
2B1-O3 — Toward Commercial Viability: Buried-contact Groove-based Architecture for Fully R2R Processed Perovskite Solar Modules

12:55 - 13:10 — Alexandra Levtchenko *(IPVF, Institut photovoltaïque d'Ile de France)*, Pilar Lopez-Varo, Marion Provost, Karim Medjoubi, Jean Rousset, Daniel Ory
2B1-O4 — Perovskite Mini-module Voltage Loss Quantification and Analysis by Large Scale Hyperspectral Photoluminescence Imaging

Session 2B2

11:30 - 11:50 — Andreas Distler *(Friedrich-Alexander-Universität Erlangen-Nürnberg)*
2B2-IS1 — Upscaling of Organic Photovoltaic Modules

11:50 - 12:10 — Chang-Qi Ma *(i-Lab & Printable Electronics Research Center, Suzhou Institute of Nano-Tech and Nano-Bionics (SINANO), Chinese Academy of Sciences (CAS), Ruoshui Road 398, Suzhou 215123, China.)*
2B2-IS2 — DEGRADATION MECHANISM OF THERMAL INSTABILITY FOR ORGANIC SOLAR CELLS

12:10 - 12:25 — Ravi K. Misra *(SPECIFIC, Faculty of Science and Engineering, Swansea University, Swansea, SA1 8EN, UK.)*, David Beynon, Eva Mazzolini, Nicola Gasparini, Trystan Watson
2B2-O1 — Comparison of electron transport layers enroute to upscaling semi-transparent organic photovoltaics

12:25 - 12:40 — Katerina Nikolaidou *(EURECAT, Centre Tecnològic de Catalunya, Functional Printing and Embedded Devices Unit, Parc Científic TecnoCampus, Av. Ernest Lluch 36, 08302 Mataró, Spain)*, Paula Pinyol Castillo, Martí Gibert Roca, Margalida Vidal-Tur, Martin Martín, Tomas Syrový, Veronica Tijero, Luis Asín, Jaume F. Martinez-Garcia, Mariano Campoy-Quiles, Ignasi Burgués-Ceballos
2B2-O2 — Next Generation Agrivoltaics Incorporating Flexible Transparent Organic Solar Modules

12:40 - 12:55 — Atiq Ur Rahman, Jacopo Hassen Rahmani, Valentina Carrarini, Andrea Reale *(CHOSE, Centre for Hybrid and Organic Solar Energy, Department of Electronic Engineering, University of Rome "Tor Vergata", Via del Politecnico 1, 00133 Rome, Italy)*, Acacia Mariah Patterson, Sydney Pfleiger, Tanner M. Melody, Brian A. Collins, Robin Basu, Michael Wagner
2B2-O3 — Semitransparent OPV cells and modules with high ACT

12:55 - 13:10 — Leonie Pap *(Fraunhofer Institute for Solar Energy Systems, Freiburg, 79110, Germany.)*, Mathias List, René Haberstroh, Lasse Bienkowski, Martin Mattenheimer, Thomas Kroyer, Jared Faisst, Birger Zimmermann, Uli Würfel
2B2-O4 — Upscaling of Semitransparent Organic Modules with a Metal-free Top Electrode reach-ing an Average Visible Transmission of 51% and a Light Utilization Efficiency of 4%

Session 2B3

11:30 - 11:50 — Nitin Padture *(School of Engineering, Brown University)*
2B3-IS1 — Connecting Mechanical Properties, Durability, and Reliability of High-Performance Perovskite Solar Photovoltaics

11:50 - 12:10 — Pavel Troshin *(Zhengzhou Research Institute of HIT)*
2B3-IS2 — Perovskite solar cells for space applications: some material and device stability challenges

12:10 - 12:25 — Ian Sellers *(Department of Electrical Engineering, University at Buffalo, Buffalo NY 14260, USA)*
2B3-O1 — Metal Halide Perovskite Solar Cells for Emerging Space Applications

12:25 - 12:40

12:40 - 12:55 — Anush Ranka *(School of Engineering, Brown University)*, Nitin Padture
2B3-O2 — Mitigating cracking of polymer substrates for flexible devices including perovskite solar cells

12:55 - 13:10 — Luigi Angelo Castriotta *(CHOSE – Centre for Hybrid and Organic Solar Energy, Department of Electronic Engineering, Tor Vergata University of Rome, via del Politecnico 1, 00133, Rome)*, Kenjiro Fukuda, Osbel Almora, Lulu Sun, Md Aslam Uddin, Haoyang Jiao, Karen Forberich, Christoph J. Brabec, Jinsong Huang
2B3-O3 — Standardized Protocols for Evaluating Mechanical Performance of Flexible Solar Cells & Modules: Insights from new Procedures ISOS-B, ISOS-M, and Novel Bending Tests

Session 2B4

11:30 - 11:50 2B4-IS1	Jovana V Milić *(Adolphe Merkle Institute, University of Fribourg)* Toward Dynamic Control of Hybrid Materials in Photovoltaics and Beyond
11:50 - 12:10 2B4-IS2	Askhat N. Jumabekov *(Department of Physics, School of Sciences and Humanities, Nazarbayev University, Astana 010000, Kazakhstan)*, Erik O. Shalenov, Hryhorii P. Parkhomenko, Madina Jelbuldina Back-Contact Perovskite Solar Cells: Advancing Performance and Stability through Innovative Architecture
12:10 - 12:25 2B4-O1	Guillermo Martinez-Denegri *(Solar Energy Division, Helmholtz-Zentrum Berlin für Materialien und Energie GmbH (HZB), Hahn-Meitner-Platz 1, 14109 Berlin, Germany)*, Florian Riesebeck, Hanifah Winarto, Sarah Liedtke, Klaus Jäger, Sebastian Berwig, Philipp Tockhorn, Steve Albrecht, Christiane Becker Textured interfaces in perovskite-based solar cells as a holistic strategy to enhance the device performance
12:25 - 12:40 2B4-O2	Angelica Simbula *(Dipartimento di Fisica, Università di Cagliari, 09042 Monserrato, Italy)*, Antonio Agresti, Sara Pescetelli, Riccardo Pau, David Dell'Angelo, Alessio Filippetti, Valeria Demontis, Daniela Marongiu, Francesco Quochi, Andrea Mura, Giovanni Bongiovanni, Aldo Di Carlo, Michele Saba Ambipolar transport and photodoping in perovskite solar cells with MXenes
12:40 - 12:55 2B4-O3	Stijn Lenaers, Stijn Lammar, Anurag Krishna, Tom Aernouts, Laurence Lutsen, Dirk Vanderzande, Wouter Van Gompel *(imo-imomec, Hasselt University, Martelarenlaan 42, Hasselt, 3500, Belgium)* Tuning the Molecular Structure of Phosphonic Acids as Interlayers for Inverted Perovskite Solar Cells
12:55 - 13:10 2B4-O4	Lucas J. Affonço, Nilton F. Azevedo Neto, Bruno Lupino, Edmar J. Gasparoto Jr, Stevan B. dos Santos, Silvia L. Fernandes, André L.J. Pereira, Allan V. Ribeiro, Alexys B. Alfonso, Augusto Batagin Neto, Rodrigo S. Pessoa, Carlos F.O. Graeff, José H.D. da Silva *(Universidade Estadual Paulista UNESP)* On the Optical Properties of Transition Metal Oxide Transport Layers
13:10 - 15:30	**Lunch Break**
	Session 2C1
15:30 - 15:50 2C1-IS1	Ute Cappel *(Uppsala University)* Ion migration in perovskites single crystals investigated with time-resolved photoelectron spectroscopy
15:50 - 16:10 2C1-IS2	Tracey Clarke *(Department of Chemistry, University College London, London, (United Kingdom))* Anion Localisation on Termini of a Non-Fullerene Acceptor Facilitates Charge Transport
16:10 - 16:25 2C1-O1	Jacek J. Baranowski, Sanjay Sahare, Mykhailo Solovan, Marcin Ziółek *(Faculty of Physics and Astronomy, Adam Mickiewicz University, Poznan 61-614, Poland)* Near-interface Probing of Perovskite Solar Cells Using Transient Absorption: Ion Segregation, 2D Phase Distribution, Stability and Coherent Phonons.
16:25 - 16:40 2C1-O2	Tomas Edvinsson *(Department of Materials Science and Engineering, Solid State Physics, Uppsala University, Box 35, 75103 Uppsala, Sweden)* Nature of the Excited State, Thermal Relaxation, and Quantum Confinement in Halide Perovskites
16:40 - 16:55 2C1-O3	Mathias Uller Rothmann *(Foshan Xianhu Laboratory)* Atomic-scale Microstructure of Lead Halide Perovskite Thin Films
16:55 - 17:10 2C1-O4	Michael P. Nielsen *(School of Photovoltaic and Renewable Energy Engineering, UNSW Sydney, Sydney, New South Wales, Australia)*, Shona McNab, Alex J. Baldacchino, Alfie Jones, Alison Ciesla, Bram Hoex, Murad J. Y. Tayebjee, Nicholas J. Ekins-Daukes Interfacial band alignment and triplet energy transfer in singlet fission silicon solar cells
	Session 2C2
15:30 - 15:50 2C2-IS1	Mariano Campoy Quiles *(Instituto de Ciencia de Materiales de Barcelona (ICMAB-CSIC), Campus UAB, 08193 Bellaterra, Barcelona, Spain)* Opportunities and limitation of Rainbow solar cells
15:50 - 16:10 2C2-IS2	Julianna Panidi *(University of Edinburgh)* Exploring the stability of bio-renewable based OPVs
16:10 - 16:25 2C2-O1	Muhammad Jahankhan Bajwa *(Korea Research Institute of Chemical Technology (KRICT))*, Sabeen Zahra, Seungjin Lee, Muhammad Haris, Du Hyeon Ryu, Chang Eun Song, Suk Shin Won Inner/Outer Side Chain Engineering of Non-Fullerene Acceptors for Efficient Large-Area Organic Solar Modules Based on Non-Halogenated Solution Processing in Air
16:25 - 16:40 2C2-O2	Paula Pinyol-Castillo *(EURECAT, Centre Tecnològic de Catalunya, Functional Printing and Embedded Devices Unit, Parc Científic TecnoCampus, Av. Ernest Lluch 36, 08302 Mataró, Spain)*, Katerina Nikolaidou, Martí Gibert-Roca, Aina López-Porta, Pablo Gamonal-Repiso, Enric Fontdecaba, Theo Rouanet, Agustín Mihi, Mariano Campoy-Quiles, Ignasi Burgués-Ceballos Laser Patterning and Plastic Integration Techniques for Scalable Organic Photovoltaic Modules
16:40 - 16:55 2C2-O3	Eunchi Kim *(Institute of Energy Materials and Devices, Photovoltaics (IMD - 3), Forschungszentrum Jülich, Germany)*, Paula Hartnagel, Barbara Urbano, Leonard Christen, Thomas Kirchartz Inferring Material Parameters from Current-Voltage Curves in Organic Solar Cells with Neural-Network-Based Surrogate Models
16:55 - 17:10 2C2-O4	Donia Fredj *(Dracula Technologies, France, 26000 Valence)* High-performance organic photovoltaic modules for various indoor application
	Session 2C3
15:30 - 15:50 2C3-IS1	Juan Bisquert *(INSTITUTO DE TECNOLOGIA QUIMICA (UPV-CSIC), València, Spain)*, Enrique H. Balaguera Markers of perovskite solar cell degradation from the transient and impedance response
15:50 - 16:10 2C3-IS2	Frédéric Sauvage *(Laboratoire de Réactivité et Chimie des Solides, CNRS UMR7314, Université de Picardie Jules Verne, Hub de l'énergie, 15 Rue Baudelocque, 80039 Amiens Cedex, France)* In Situ Characterization Techniques For Understanding Degradation in Hybrid Halide Perovskites
16:10 - 16:25 2C3-O1	Ennio Luigi Comi, Evelyne Knapp, Sandra Jenatsch, Daniele Braga *(Fluxim AG, Winterthur, Switzerland)*, Mattia Battaglia, Miguel Torre, Christoph Kirsch, Beat Ruhstaller Investigating Inhomogeneities and Turn-on Dynamics in Carbon-Based Perovskite Solar Cells Using Advanced Imaging and Simulation Techniques
16:25 - 16:40 2C3-O2	Sarah Gillespie *(AMOLF Institute, Science Park 104, Amsterdam, 1098XG The Netherlands)*, Agustin Alvarez, Bruno Ehrler, Veronique Gevaerts, Bart Geerligs, Erik Garnett An Optical Equivalent of Impedance Spectroscopy
16:40 - 16:55 2C3-O3	Huriye Ertay *(IPVF, Institut photovoltaïque d'Ile de France)*, Davide Ceratti, Tim Kodalle, Marion Provost, Carolin Sutter-Fella, Philip Schulz In-situ Multimodal Analysis of Metal Halide Perovskite Film Formation and Degradation for Stable Perovskite Solar Cells

16:55 - 17:10 2C3-O4	Aruto Akatsuka *(Chiba University, Graduate School of Engineering, Chiba, Japan)*, Minh Anh Truong, Atsushi Wakamiya, Gaurav Kapil, Shuzi Hayase, Hiroyuki Yoshida Molecular Orientations of Carbazole Derivative Hole-Collecting Monolayer for Perovskite Solar Cells
	Session 2C4
15:30 - 15:50 2C4-IS1	Maria Laura Parisi *(R2ES Lab, Research on Renewable Energy and Sustainability, Department of Biotechnologies, Chemistry and Pharmacy, University of Siena, Siena, Italy)*, Mercy Jelegat Kypiator, Adalgisa Sinicropi Prospective Life Cycle Assessment for the eco-design of perovskite/silicon tandem solar cells from the lab scale to industrial solar devices
15:50 - 16:10 2C4-IS2	Tayebeh Ameri *(Chair for Composite Materials, Department of Materials Science, Faculty of Engineering, Christian-Albrechts-Universität zu Kiel, Germany)* Additive Engineering for Solution-processed Photovoltaics
16:10 - 16:25 2C4-O1	Daniel Prochowicz *(Institute of Physical Chemistry, Polish Academy of Science, Kasprzaka 44/52, 01-224 Warsaw, Poland)* Improving Morphology and Optoelectronic Properties in All-Inorganic Perovskite Solar Cells
16:25 - 16:40 2C4-O2	Stepan Demchyshyn *(Helmholtz-Zentrum Berlin für Materialien und Energie GmbH, 14109, Berlin, Germany.)*, Bekele Hailegnaw, Christoph Putz, Lukas Lehner, Martin Kaltenbrunner Lightweight and Flexible Perovskite Solar Cells System Integration
16:40 - 16:55 2C4-O3	Zeynab Skafi *(CHOSE (Centre for Hybrid and Organic Solar Energy), Department of Electronic Engineering, Tor Vergata University of Rome, Rome, Italy)*, Luigi Angelo Castriotta, Babak Taheri, Fabio Matteocci, Matthias Fahland, Farshad Jafarzadeh, Ebin Joseph, Abhisek Chakraborty, Vaibhav Singh, Vahid Mottaghitalab, Leila Mivehi, Francesca Brunetti, Luca Sorbello, Aldo Di Carlo, Thomas M. Brown Integrating Perovskite Solar Cells on Polycarbonate Film Substrates
16:55 - 17:10 2C4-O4	karthikeyan Pandurangan *(Department of Biotechnology, Chemistry and Pharmacy, R2ES Lab, University of Siena, 53100 Siena, Italy)*, Luigi Vesce, Elene Iannibelli, Maurizio Stefanelli, Hafez Nikbakht, Mercy Jelagat Kipyator, Maria Laura Parisi, Adalgisa Sinicropi, Aldo Di Carlo Fully Printable Perovskite Solar Module with Carbon Electrode for low light environments
17:10 - 17:35	**Break - Room change**
	Session 2D
17:35 - 18:00 2D-I1	Giulia Grancini *(University of Pavia)* Manipulation of Low Dimensional Hybrid Perovskites: a tool for breaking perovskite solar cell efficiency and stability limits
18:00 - 18:05	Industry talk
18:05 - 18:30 2D-I2	Paola Vivo *(Hybrid Solar Cells, Faculty of Engineering and Natural Sciences, Tampere University, P.O. Box 541, Tampere, FI-33014 Finland)* Perovskite-inspired metal halides for indoor photovoltaic applications
18:30 - 20:00	**Poster Session**

May 14th - Day 3 (Wednesday) 3

Session 3A

09:00 - 09:30 | 3A-K1
Derya Baran *(Materials Science and Engineering Program (MSE), Physical Sciences and Engineering Division (PSE), King Abdullah University of Science and Technology (KAUST), Thuwal, 23955, Saudi Arabia)*
Slowing Down in an Accelerated World: Understanding Degradation Pathways in Organic and Perovskite Photovoltaics for Extended Lifetime

09:30 - 09:55 | 3A-I1
Thomas Anthopuolos *(Manchester University, UK)*
Advancing the efficiency and stability of organic photovoltaics

09:55 - 10:20 | 3A-I2
Marina Freitag *(SNES, Newcastle University, UK)*
IoT Networks Powered by DSC-Hybrid Photocapacitors

10:20 - 10:50 | 3A-K2
Tsutomu Miyasaka *(Toin University of Yokohama)*
Interfacial Engineering of Lead-based and Lead-free Perovskite Solar Cells

10:50 - 11:35 **Coffee Break**

Session 3B1

11:35 - 11:55 | 3B1-IS1
Joseph Berry *(National Renewable Energy Laboratory, 15013 Denver W Pkwy, Golden, CO 80401, United States)*
Challenges in metal halide perovskite enable photovoltaics.

11:55 - 12:10 | 3B1-O1
Sara Pescetelli *(1Centrer for Hybrid and Organic Solar Energy (CHOSE), Department of Electronic Engineering, Tor Vergata University of Rome, Rome, Via del Politecnico 1, 00133 Italy)*, Antonio Agresti, Hanna Pazniak, Enrico Leonardi, Emmanuel Kymakis, Aldo Di Carlo
Interface Design in Perovskite Solar Cells: Enhancing Electrical Parameters and Scaling Up with 2D Materials

12:10 - 12:25 | 3B1-O2
Sushil Sangale *(Department of Flexible and Printable Electronics, LANL-JBNU Engineering Institute-Korea, Jeonbuk National University)*, Sung-Nam Kwon, Seok-In Na
Colloidal Ink Engineering for Slot-Die Processes to Realize Highly Efficient and Robust Perovskite Solar Modules

12:25 - 12:40 | 3B1-O3
Matteo Lacomini *(Coatema Coating Machinery GmbH)*
Lab to Fab: Advancing the future of solar with R2R Technology

12:40 - 12:55 | 3B1-O4
Salvatore Valastro *(CNR IMM Section of Catania)*, Gaetano Calogero, Emanuele Smecca, Valentina Arena, Giovanni Mannino, Corrado Bongiorno, Ioannis Deretzis, Giuseppe Fisicaro, Antonino La Magna, Simone Galliano, Gabriele Viada, Matteo Bonomo, Claudia Barolo, Alessandra Alberti
Polyurethane-encapsulated mesoporous carbon-based perovskite solar cells resilient to extreme humidity and mitigation of the related reversible J-V bump

12:55 - 13:10 | 3B1-O5
Marta Pereira *(LEPABE - Laboratory for Process Engineering, Environment, Biotechnology and Energy, Faculdade de Engenharia, Universidade do Porto, Rua Dr. Roberto Frias, 4200-465 Porto, Portugal.)*, Jorge Martins, Dzmitry Ivanou, Seyedali Emami, Adélio Mendes
Light Induced Degradation of Perovskite Films and Solar Cells: Study of Controlled Atmosphere Sealing Approach

Session 3B2

11:35 - 11:55 | 3B2-IS1
Han Young Woo *(Department of Chemistry, Korea University)*
n-Doped Interlayer for Inverted Perovskite Solar Cells

11:55 - 12:10 | 3B2-O1
Jasmeen Nespoli, Maartje van der Meer, Sander Heester, Bahiya Ibrahim, Bart Boshuizen, Jan Anton Koster, Lars Bannenberg, tom Savenije *(Department of Chemical Engineering, Faculty of Applied Sciences, Van der Maasweg 9, Delft University of Technology, 2629 HZ Delft, The Netherlands)*
Quantitative Analysis of Doping in Mixed Sn-Pb Perovskites

12:10 - 12:25 | 3B2-O2
Sanjay Sahare *(Adam Mickiewicz University, Poznan 61-614, Poland ul. Uniwersytetu Poznańskiego 2, 61-614, Poznań Poland)*, Mykhailo Solovan, Jacek Baranowski, Hryhorii Parkhomenko, Marcin Ziółek
Unveiling the Recombination Dynamics in 2D Perovskite/Mxene Heterostructure

12:25 - 12:40 | 3B2-O3
Asayil Alsulami *(Materials Science and Engineering, King Abdullah University of Science and Technology (KAUST), Thuwal 23955-6900, Saudi Arabia)*, Luis Lanzetta, Derya Baran
Mechanistic Insights into Oxidative Degradation of Hybrid Tin-Lead Perovskites: Avenues for Enhanced Stability

12:40 - 12:55 | 3B2-O4
Narendra Pai *(Flexible Electronics Laboratory, CSIRO Manufacturing, Clayton, VIC 3168, Australia.)*, Luke Sutherland, Aaron Seeber, Wen Liang Tan, Andrew Scully, Yogesh Gulia, Mei Gao, Dechan Angmo
Stabilizing Black Phase CsPbI3 at Low Temperature Under an Ambient Processing Environment

12:55 - 13:10 | 3B2-O5
Jérôme Gautier *(AMOLF, Science Park 104, Amsterdam, The Netherlands)*, Sarah Gillespie, Erik Garnett
Harnessing light induced dynamics to enhance photoluminescence in perovskites thin film

Session 3B3

11:35 - 11:55 | 3B3-IS1
Elizabeth Gibson *(University Newcastle, UK)*
Dye development for tandem Dye Sensitized Solar Cells

11:55 - 12:10 | 3B3-O1
Baptiste Charrier *(Department of Chemistry, NIS Interdepartmental Centre and INSTM Reference Centre, Università Degli Studi di Torino, Via Pietro Giuria 7, 10125, Torino, Italy.)*, Mattia Rubes, Diego Civarelli, Vijay Challuri, Matteo Bonomo, Nadia Barbero, Frédéric Sauvage, Claudia Barolo
A study of the degradation of indoor DSSCs after bufexamic acid treatment

12:10 - 12:25 | 3B3-O2
Diego Mirani *(Univ. Grenoble Alpes, CEA, CNRS, IRIG-SyMMES, 38000 Grenoble, France.)*, Samuel Fauvel, Jhon-Edinson Galvez Arango, Pascale Maldivi, Antonio J. Riquelme, Cyril Aumaitre, Renaud Demadrille
Molecular engineering of photochromic dyes for DSSCs with improved performance

12:25 - 12:40 | 3B3-O3
Chinmai Mysorekar *(Faculty of Physics and Astronomy, Adam Mickiewicz University, 2 Uniwersytetu Poznańskiego, 61-614, Poznań, Poland)*, Adam Glinka, Nur Izyan, Safalmani Pradhan, Shyam Sudhir Pandey, Marcin Ziółek
Expected and surprising effects observed in co-sensitized dye systems

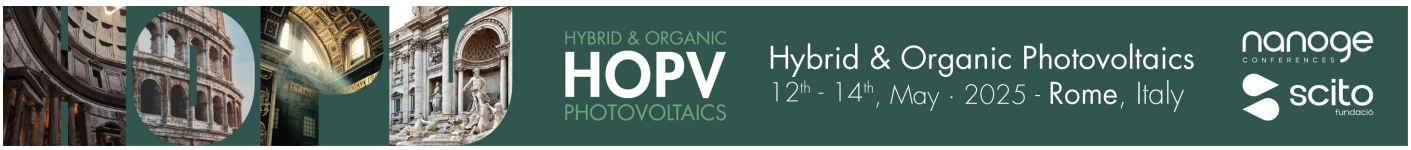
12:40 - 12:55 | 3B3-O4
Suraj Soman *(CSIR-NIIST)*
Fascinating Lab to Land Journey of Versatile Nanostructured Indoor Solar Cells

12:55 - 13:10 | 3B3-O5
María Fernanda Cerdá *(Laboratorio de Biomateriales, IQB, Facultad de Ciencias, UdelaR. Montevideo, Uruguay)*
DSSC based on natural dyes: comparison of the measured efficiencies using two iodine-based electrolytes

Session 3B4

11:35 - 11:55 3B4-IS1	Monica Morales-Masis *(NanoLab, MESA+ Institute for Nanotechnology, University of Twente, P.O. Box 217, 7500 AE Enschede, The Netherlands)* Advances, challenges and opportunities of physical vapor deposition of halide perovskites
11:55 - 12:10 3B4-O1	Emanuele Smecca *(Istituto per la Microelettronica e Microsistemi (IMM), Consiglio nazionale delle Ricerche (CNR), Ottava Strada 5, Zona Industriale, 95121, Catania, Italy)*, Valentina Arena, Giovanni Mannino, Salvatore Valastro, Ioannis Deretzis, Nadir Vanni, Aurora Rizzo, Gaetano Calogero, Giuseppe Fisicaro, Corrado Bongiorno, Stefano Perugini, Antonino La Magna, Alessandra Alberti In-depth study of the evaporation process of high-quality MAPbI3 by Low Vacuum - Proximity Space Effusion (LV-PSE) for semitransparent perovskite solar cells.
12:10 - 12:25 3B4-O2	Sahana Suresh *(Institute for Photovoltaics, University of Stuttgart, Pfaffenwaldring 47, 70569, Stuttgart, Germany)*, Chittaranjan Das, Michael Saliba All-inorganic CsPbBr3 perovskite solar cells via sequential thermal evaporation
12:25 - 12:40 3B4-O3	Shijun Shi *(Department of Advanced Interdisciplinary Studies, Graduate School of Engineering, University of Tokyo)*, Masato Sotome, Kazuteru Nonomura, Hiroshi Segawa, Takashi Kondo Impact of Substrate Heating and Cooling Rates on Crystallization and Inverted Solar Cells Performance of Co-evaporated $CsPbI_2Br$ Perovskite Thin Films
12:40 - 12:55 3B4-O4	S. Dilara Öz *(University of Cologne, Institute for Physical Chemistry)*, Selina Olthof Investigation of Substrate Dependency in Thermal Evaporation of mix-halide FAPbI1Br2 Perovskite Thin Films
12:55 - 13:10 3B4-O5	Suzana Kralj *(MESA+ Institute, University of Twente, 7500 AE Enschede, The Netherlands)*, Marly Nales, Kerem Artuk, Christian M. Wolff, Monica Morales-Masis Hybrid Sequential Process for Perovskite Absorbers Growth by Pulsed Laser Deposition (PLD)
13:10 - 15:30	**Lunch Break**
	Session 3C1
15:30 - 15:50 3C1-IS1	Iris Visoly-Fisher *(Ben-Gurion Solar Energy Center Swiss Institute for Dryland Environmental and Energy Research Blaustein Institutes for Desert Research, Sede Boqer Campus, Ben-Gurion University of the Negev)* Outdoor Operational Stability Testing of Perovskite Solar Cells
15:50 - 16:10 3C1-IS2	Udo Bach *(Australian Centre for Advanced Photovoltaics, Department of Chemical and Biological Engineering, Monash University, Clayton, VIC, Australia.)*, Jie Zhao Optimized Thiocyanate Passivation for Efficient and Stable Perovskite Solar Cells
16:10 - 16:25 3C1-O1	Saskia Fiedler *(NWO-Institute AMOLF, Science Park 104, 1098 XG Amsterdam, The Netherlands)*, Imme Schuringa, Robin Schot, Linh Lan Nguyen, Lam Yeng Ming, Bruno Ehrler, Albert Polman Electron beam-based study of optoelectronic properties of metal halide perovskites
16:25 - 16:40 3C1-O2	Benjamin Gallant *(School of Chemistry, University of Birmingham, Edgbaston B15 2TT, UK)*, Satyawan Nagane, Dominik Kubicki, Sam Stranks Inducing Octahedral Tilting via Organic Molecule Templating for Highly Stable Photoactive Formamidinium Lead Triiodide
16:40 - 16:55 3C1-O3	Gerrit Boschloo *(Department of Chemistry – Ångström Laboratory, Uppsala University, Uppsala, Sweden)* Electrochemical Proton Insertion in n-i-p Perovskite Solar Cells
16:55 - 17:10 3C1-O4	Teresa S. Ripolles *(Instituto de Ciencia de los Materiales de la Universidad de Valencia (ICMUV), 46980, Paterna, Valencia, Spain.)* Enhancing Perovskite Solar Cell Diagnostics with Current-Voltage Reconstruction Techniques.
	Session 3C2
15:30 - 15:50 3C2-IS1	Omar E. Solis, Miriam Minguez- Avellan, Víctor Sagra-Rodríguez, Jaume Noguera-Gómez, Teresa Ripollés, Rafael Abargues, Pablo P. Boix *(Instituto de Tecnología Química (ITQ). Universitat Politècnica de València- Consejo Superior de Investigaciones Científicas (UPV-CSIC). 46022 València, Spain)* Postsynthetic reactions to harness the full potential of metal halide perovskites.
15:50 - 16:10 3C2-IS2	Selina Olthof *(University of Cologne)* Reflection Electron Energy Loss Spectroscopy of Halide Perovskites
16:10 - 16:25 3C2-O1	Abraha Gidey *(Laboratory for Solar Energy and Fuels (LSEF), School of Engineering, The University of British Columbia, Kelowna V1V1V7, Canada)*, Elnaz Rad, Alexander Uhl Room Temperature Synthesis of ultra-small SnO2 Quantum Dot as Charge Transport Layer for Perovskite Solar Cells
16:25 - 16:40 3C2-O2	Tariq Sheikh *(King Abdullah University of Science and Technology (KAUST))* III-V semiconductor quantum dots for SWIR light emission and detection
16:40 - 16:55 3C2-O3	Elisa Fabbretti *(Department of Materials Science and Solar Energy Research Centre (MIB-SOLAR), University of Milano-Bicocca, Via Cozzi 55, 20126, Milan, Italy)*, Amin Hasan Husien, Rahul Patidar, Karen Valadez-Villalobos, James McGettrick, Andreia Amighini Alerhush, Ershad Parvazian, Matthew L. Davies, Trystan Watson, Giorgio Tseberlidis, Vanira Trifiletti, Simona Binetti, Alessandro Minotto, Adele Sassella Chalcogenide Nanoparticles Hole Transporting Material Improving Perovskite Solar Cells Stability
16:55 - 17:10 3C2-O4	Fraser J. Angus *(University of Glasgow School of Chemistry Joseph Black Building Glasgow, G128QQ, UK)*, Lucy J. F. Hart, Yin Li, Abdul Khaleed, Philip Calado, James R. Durrant, Aleksandra B. Djurišić, Pablo Docampo, Piers R. F. Barnes More is Different: Mobile Ions Improve the Design Tolerances of Perovskite Solar Cells
	Session 3C3
15:30 - 15:50 3C3-IS1	Nadia Barbero *(Department of Chemistry, NIS and INSTM Reference Centre, Università degli Studi di Torino, Via Pietro Giuria 7, Torino, 10125 Italy)*, Maksym Bokan, Kateryna Bondar, Baptiste Charrier, Donato Pasculli, Mattia Rubes, Ana Yancy Segura Zarate, Raffaele Borrelli, Matteo Bonomo, Simone Galliano, Frédéric Sauvage, Claudia Barolo Colorless Dye Sensitized Solar Cells for Building Integration
15:50 - 16:10 3C3-IS2	David Jones *(School of Chemistry, Bio21 Institute, University of Melbourne, Australia.)* Secondary Self-Assembly in Singlet Fission Chromophore Design
16:10 - 16:25 3C3-O1	Fabio Matteocci *(CHOSE – Centre for Hybrid and Organic Solar Energy, Department of Electronic Engineering, University of Rome ''Tor Vergata'', Via del Politecnico 1, 00133 Roma, Italy)*, Marco Girolami, Diego Di Girolamo, Jessica Barichello, Barbara Paci, Paolo Moras, Daniele Trucchi, Stefania Cacovich, Aldo Di Carlo Wide-Band Gap Perovskite based on bromide halide: Impact of light, thermal and X-Ray Irradiation stresses on semi-transparent perovskite solar cells and detectors

16:25 - 16:40 3C3-O2	Simone Galliano *(Department of Chemistry, NIS Interdepartmental and INSTM Reference Centre. University of Turin, Torino, Italy)*, Marcello Franzini, Kezia Sasitharan, George H. Morritt, Marco Zanetti, Marco Borri, Andrea Reale, Marina Freitag, Claudia Barolo Solution-processable coordination polymers for counter-electrode in DSSCs
16:40 - 16:55 3C3-O3	Kezia Sasitharan *(School of Natural and Environmental Sciences, Newcastle University, United Kingdom NE1 7RU)* Tunable Nanosheets for Ambient Energy Storage
16:55 - 17:10 3C3-O4	Francesca De Rossi *(CHOSE – Centre for Hybrid and Organic Solar Energy, Department of Electronic Engineering, Tor Vergata University of Rome, via del Politecnico 1, 00133, Rome)*, Daniel Augusto Machado de Alencar, Abhinandan Patra, Samyuktha Noola, Giulio Koch, Matteo Bonomo, Claudia Barolo, Francesca Brunetti Perovskite Solar Cells and Supercapacitors on Flexible Substrates
	Session 3C4
15:30 - 15:50 3C4-IS1	Alessio Gagliardi *(Technische Universität München, TUM School of Computation, Information and Technology, Electrical Engineering Department, Atomistic Modeling Center (AMC), Munich Data Science Institute (MDSI) München, Germany)* Material dynamics simulations enhanced by machine learning through generative methods integrated with experimental data
15:50 - 16:10 3C4-IS2	Alison Walker *(Department of Physics University of Bath, BA2 7AY, UK)*, Kjeld Jensen, Petra Cameron, Giles Richardson, Will Clarke Identifying Perovskite Solar Cell Degradation Mechanisms From A Digital Twin
16:10 - 16:25 3C4-O1	Petra Cameron *(Department of Chemistry, University of Bath, Claverton Down, Bath BA2 7AY, United Kingdom)*, Will Clarke, Giles Richardson Linking model and experiment - interpreting the impedance spectroscopy of perovskite solar cells
16:25 - 16:40 3C4-O2	Simon Ternes *(CHOSE – Centre for Hybrid and Organic Solar Energy, Department of Electronic Engineering, Tor Vergata University of Rome, via del Politecnico 1, 00133, Rome)*, Maurizio Stefanelli, Felix Reichelt, Alessio Gagliardi, Aldo Di Carlo Solving the problem of achieving consistent gas quenching in batch-to-batch coating of perovskite photovoltaics by Bayesian optimization of drying parameters
16:40 - 16:55 3C4-O3	Martin Majewski *(Helmholtz Institute Erlangen-Nürnberg for Renewable Energy, Forschungszentrum Jülich, Germany)*, Shudi Qiu, Olivier J. Ronsin, Tian Du, Hans-J. Egelhaaf, Christoph J. Brabec, Jens Harting Simulation of the impact of processing conditions for solution-processed thick perovskite layers
16:55 - 17:10 3C4-O4	Leonard Christen *(IMD3-Photovoltaics, Forschungszentrum Jülich GmbH, 52425 Jülich, Germany)*, Thomas Kirchartz On the Value of Device Characterization for the Optimization of Solar Cells
17:10 - 17:35	**Break - Room change**
17:35 - 18:35	**Concluding round table**
18:35 - 19:00	**Conclusions and prizes**



Poster Contribution

001	Min-Ho Lee *(School of Electrical Engineering (EE), Korea Advanced Institute of Science and Technology (KAIST), 291 Daehak-ro, Yuseong-gu, Daejeon 34141, Republic of Korea)*, Jung-Yong Lee Toward Efficient Hybrid Perovskite/Organic Solar Cells: Dipole Interfaces for Enhanced Charge Extraction and Near-Infrared Photon Harvesting
003	Zijian Peng *(Institute of Materials for Electronics and Energy Technology (i-MEET), Friedrich-Alexander-Universität Erlangen-Nürnberg, 91058 Erlangen, Germany)*, Larry Lüer, Christoph Brabec Locating the non-radiative recombination losses of perovskite solar cells during accelerated ageing
015	Weiwei Zuo *(Institute for Photovoltaics (ipv), University of Stuttgart, Germany)* Crystallization of Pure-phase Halide Perovskite Films and Strategies for Optimization
020	Romain Lavoipierre *(Univ. Grenoble Alpes, Univ. Savoie Mont Blanc, CNRS, Grenoble INP, LEPMI, 38000 Grenoble, France)*, Emilie Planes, Lionel Flandin, Lara Perrin Electrodeposition of Bismuth doped Perovskite for Photovoltaic Application
021	Muhammad Ans *(Institute of Physical Chemistry, Polish Academy of Sciences, Kasprzaka 44/52, 01-224 Warsaw, Poland)* Revealing the Impact of Aging on Perovskite Solar Cells Employing Nickel Phthalocyanine-Based Hole Transporting Material
027	Fanny Thorimbert *(1AMOLF Institute, Science Park 104, Amsterdam 1098XG, Netherlands)*, Omolara Adisa, Jerome Gautier, Marcel Kouwenhoven, Daan Methorst, Erik Garnett Light In-coupling in situ Transmission Electron Microscopy of Inorganic Perovskites for Polaron Analysis
034	Marcel Kouwenhoven *(AMOLF Institute, Science Park 104, Amsterdam, 1098XG The Netherlands)*, Jerôme Gautier, Erik Garnett Repetition-Rate Dependence of Halide Segregation in Perovskite Photovoltaics: Implications for Multicolor Luminescent Memory
035	Zafar Igbal *(Solar Energy Division, Helmholtz-Zentrum Berlin für Materialien und Energie GmbH (HZB), Hahn-Meitner-Platz 1, 14109 Berlin, Germany)*, Antonio Abate Bulk p-doping versus Surface Tin Oxidation in Tin Perovskite Halide Materials
039	Mykhailo Khytko *(Institute of Physics, Academy of Sciences of the Czech Republic, Cukrovarnická 10, 16200, Prague 6, Czech Republic.)*, Swarnendu Banerjee, Lucie Landova, Antonín Fejfar, Martin Ledinský AFM Study of Perovskite Degradation: Insights into Stability and Surface Morphology
042	Muhammad Fareed U Din Masood *(Fraunhofer Institute for Solar Energy Systems ISE, Germany)*, Georgios Loukeris, Clemens Baretzky, Audrey Elizabeth Gillen, Kaleb Strahringer, Uli Würfel, Markus Kohlstädt, Minasadat Heydarian Assessment of annealing strategies for surface passivation layers in wide band gap perovskite solar cells
045	Joanna Kruszyńska *(Institute of Physical Chemistry, Polish Academy of Sciences, Kasprzaka 44/52, 01-224 Warsaw, Poland)*, Daniel Prochowicz Molecular Engineering of Azahomofullerene-based Electron Transporting Materials for Efficient and Stable Perovskite Solar Cells
046	Xuzheng Liu *(Light Technology Institute (LTI) at Karlsruhe Institute of Technology (KIT), Karlsruhe, Engesserstr. 13, 76131, Germany)*, Mohammad Gholipoor, Benjamin Hacene, Petermann Julian, Lingyi Fang, Renjun Guo, Ulrich Wilhelm Paetzold Monolithic Perovskite/Silicon Tandem Solar Cells: ARC and Front Electrode Optimization
048	Mengyun Chen *(Linköping University, Sweden)*, Feng Gao Kinetically controlled synthesis of quasi-square CsPbI3 nanoplatelets with excellent stability
052	Daan Methorst *(1AMOLF Institute, Science Park 104, Amsterdam 1098XG, Netherlands)*, Erik Garnett Revolutionizing Diffuse Light Concentration Utilizing the Power of Collimation
055	Anyssa DERI *(IPVF, Institut photovoltaïque d'Ile de France)*, Marion Provost, Karim Medjoubi, Mirella El Khatrib, Daniel Ory, Jorge Posada A novel method for perovskite solar cells failure origin
063	Daniele Catone *(Istituto di Struttura della Materia - CNR (ISM-CNR), EuroFEL Support Laboratory (EFSL), Via del Fosso del Cavaliere 100, 00133, Rome, Italy)*, Giuseppe Ammirati, Stefano Turchini, Francesco Toschi, Patrick O'Keeffe, Alessandra Paladini, Faustino Martelli, Reem Khanfar, Daimiota Takhellambam, Sara Pescetelli, Antonio Agresti Hole Transfer Dynamics in Thin Films of Mixed-Dimensional Quasi-2D Perovskites
067	Robin Schot *(NWO-Institute AMOLF, Science Park 104, 1098 XG Amsterdam, The Netherlands)*, Imme Schuringa, Saskia Fiedler, Tom Veeken, Bruno Ehrler, Albert Polman Morphological Effect on Cathodoluminescence Outcoupling in Perovskite Thin Films
069	Manas Ranjan Samantaray *(Centre for Hybrid and Organic Solar Energy, Department of Electronic Engineering University of Rome Tor Vergata, Rome, Italy)*, Sara Pescetelli, Antonio Agresti Interfacial Engineering of 2D Perovskite Solar Cells Using Molybdenum Oxide Thin Film as Interfacial Layer: A Simulation Study
073	Eliana Loureiro *(LEPABE – Laboratory for Process Engineering, Environment, Biotechnology and Energy, Faculty of Engineering, University of Porto, Rua Dr. Roberto Frias, 4200-465 Porto, Portugal.)*, Jorge Martins, Rúben Madureira, Seyedali Emami, Dzmitry Ivanou, Adélio Mendes Lead Sequestration for Laser Sealing Perovskite Solar Cells: An Innovative and Environmentally Safe Strategy
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