### Conference Program

**1st March – Day 1 (Wednesday)**

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<td>07.45</td>
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<td>08.45</td>
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<tr>
<td>09.00</td>
<td>G1.11</td>
<td>Nazeeruddin, Mohammad (Ecole Polytechnique Fédérale de Lausanne)</td>
<td>Perovskite Solar Cells: A New Paradigm in Energy Sector</td>
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<tr>
<td>09.30</td>
<td>G1.12</td>
<td>Herz, Laura (University of Oxford)</td>
<td>Hybrid Metal Halide Perovskites: Optoelectronic Properties and Stability</td>
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<td>10.00</td>
<td>G1.13</td>
<td>Hodes, Gary (Weizmann Institute of Science)</td>
<td>Stability of Pb- and Sn-based Halide Perovskite PV Cells</td>
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<td>10.30</td>
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<td>10.45</td>
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**Session A1**

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<tr>
<td>11.15</td>
<td>Tarasov, Alexey (Lomonosov Moscow State University)</td>
<td>A New Fabrication Strategy of Perovskite Films for Next Generation Solar Cells Using Melts of Novel Precursors</td>
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<td>11.30</td>
<td>Ávila, Jorge (Universitat de València)</td>
<td>Efficient Wide Band Gap Hybrid Perovskites for Monolithic Tandem Solar Cells</td>
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<td>11.45</td>
<td>Grozema, Ferdinand (Delft University of Technology)</td>
<td>Multilayer 2D Perovskites with Specific Functionality in the Organic Component</td>
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<td>12.00</td>
<td>Giesbrecht, Nadja (Ludwig Maximilian University of Munich)</td>
<td>Tuneable Mapbi3 Perovskite Crystal Alignment and their Impact in Optoelectronic Applications</td>
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<tr>
<td>12.15</td>
<td>Kazes, Miri (The Weizmann Institute)</td>
<td>Iodine-Doping Effects on MAPbI3 Charge Transport</td>
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<tr>
<td>12.30</td>
<td>Zohar, Arava (Weizmann institute)</td>
<td>Nucleation, Growth and Structural Transformations of Perovskite Nanocrystals</td>
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<td>12.45</td>
<td>Wang, Feng (Linköping University)</td>
<td>Benzylamine Modification for Air-Stable and High-Efficiency Perovskite Solar Cells</td>
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### Session B1
Room: Salón de Grados G

Chair: Satoshi Ushida

11.15  
**B1.O1**  
Charge Transfer from Methylammonium Lead Iodide Perovskite to Organic Transport Materials: Efficiencies, Transfer Rates and Interfacial Recombination

Hutter, Eline (Delft University of Technology)

11.30  
**B1.O2**  
Mobility-lifetime Products in MAPbI3 Films

Levine, Igal (Weizmann Institute of Science)

11.45  
**B1.O3**  
Reduced Recombination for High-Open-Circuit Voltages in Perovskite Solar Cells

Wolff, Christian M. (Universität Potsdam)

12.00  
**B1.O4**  
Whereabouts of recombination in Perovskite Solar Cells

Juan A, Anta (Universidad Pablo de Olavide)

12.15  
**B1.O5**  
Understanding Recombination Processes in Perovskite Solar Cells Using Frequency and Time Domain Measurements to Deconvolve Electronic and Ionic Interactions

Pockett, Adam (Swansea University)

12.30  
**B1.O6**  
Direct Experimental Evidence of Ionic Migration in Halide Perovskite Films by GDOES Measurements

Bernard, Geffroy (Université Paris-Saclay)

12.45  
**B1.O7**  
Insight into the Transient Behaviour of a Perovskite Solar Cell

Knapp, Evelyne (ICP, ZHAW)

#### Lunch

### General Session H1
Room: Salón de Actos A

Chair: Filippo de Angelis

15.00  
**H1.11**  
Frontiers in Materials Modelling of Hybrid Perovskites: Electrons, Phonons and Dynamic Disorder

Walsh, Aron (Imperial College London)

15.30  
**H1.12**  
UHV Surface Science as Powerful Tool to Unravel Principles and Processes in Hybrid Perovskites

Olthof, Selina (Universität zu Köln)

16.00  
**H1.13**  
Characterization of Perovskite Photovoltaic Cells with Capacitance Spectroscopy

Miyano, Kenjiro (National Institute for Materials Science)

### Session C1
Room: Salón de Actos A

Chair: Shi Dong

16.30  
**C1.O1**  
Stability of Perovskite Solar Cells: the Use of Different Stress Conditions to Identify Degradation Pathways

Senes, Alessia (TNO)

16.45  
**C1.O2**  
Revealing a Discontinuity in theDegradation Behaviour Of CH3NH3PbI3 during Thermal Operation

Smecca, Emanuele (National Research Council of Italy)
### Session D1
Room: Salón de Grados G

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<td>Dewalque, Jennifer (University of Liege)</td>
<td>Inverse Opal Photoanodes: Preparation and Optical Properties</td>
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<td>16.45</td>
<td>Wang, Tianyi (Institute for Atomic and Molecular Physics, AMOLF)</td>
<td>Indirect to Direct Bandgap Transition in Methylammonium Lead Halide Perovskite</td>
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#### 2nd March - Day 2 (Thursday)

### General Session G2
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<tr>
<td>09.00</td>
<td>Mhaisalkar, Subodh (National Technological University)</td>
<td>Multifunctional Cation Incorporated Perovskites and their Photophysical Investigations for High-Stability Solar Cells</td>
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<tr>
<td>09.30</td>
<td>Bisquert, Juan (Universitat Jaume I)</td>
<td>Interpretation of Kinetic Processes Governing the Operation of Perovskite Solar Cells</td>
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<td>10.00</td>
<td>Buecheler, Stephan (EMPA, Swiss Federal Laboratories for Materials Science and Technology)</td>
<td>Halide Perovskite Solar Cells for All-Thin Film Tandem Devices</td>
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<td>10.30</td>
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### Session A2
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<tr>
<td>11.15</td>
<td>De Angelis, Filippo (The Institute of Molecular Science and Technologies)</td>
<td>Modeling the Photochemistry of Lead Halide Perovskites</td>
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<td>11.30</td>
<td>Bover-Richard, Soline (UMR FOTON, CNRS, INSA)</td>
<td>Symmetry-Based Tight Binding Modeling of Halide Perovskite Semiconductors</td>
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<td>11.45</td>
<td>Mora-Seró, Iván (Universitat Jaume I)</td>
<td>Inductive Loop and Negative Capacitance in Perovskite Solar Cells, not Just an Exotic Behavior</td>
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<td>12.00</td>
<td>Sherkar, Tejas S. (University of Groningen) Improving Perovskite Solar Cells</td>
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<td>12.15</td>
<td>Neukom, Martin (Fluxim AG) Explanation for Reduced IV-Curve Hysteresis in</td>
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<td>Highly Efficient Perovskite Solar Cells</td>
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<td>12.30</td>
<td>Uchida, Satoshi (University of Tokyo) Simulation of I-V Curves for Inverted</td>
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<td>Structure Perovskite Solar Cells using Equivalent Circuit Model with Inductance</td>
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<td>12.45</td>
<td>Anaya, Miguel (Consejo Superior de Investigaciones Cient) Optical Design of</td>
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<td>Perovskite Based Tandem Solar Cells</td>
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**Session B2**

**Room: Salón de Grados G**

**Chair:** Mmantse Diale

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<td>11.15</td>
<td>Just, Justus (Helmholtz-Zentrum Berlin) Reaction Pathways and Kinetics during</td>
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<td>the Formation of Mixed-halide Perovskites by In-situ Optical Spectroscopy</td>
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<td>Combined with In-situ X-ray Spectroscopy and Diffraction</td>
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<td>11.30</td>
<td>Jo, William (Ewha Womans University) Fabrication of Lead-Free MASn(I,Br)3</td>
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<td>Solar Cells and Their Stability Probed by Scanning Probe Microscopy</td>
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<td>11.45</td>
<td>Safdari, Majid (KTH Royal Institute of Technology) Chemical Structure and</td>
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<td>Physical Properties of Organic-Inorganic Metal Halide Materials for Solid</td>
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<td>State Solar Cells</td>
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<td>12.00</td>
<td>Pistor, Paul (Catalonian Institute for Energy Research) Structural and</td>
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<td>Optical Investigation of the Double Perovskite Cs2AgBiBr6</td>
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<td>12.15</td>
<td>Aygüler, Meltem (Ludwig Maximilian University of Munich) Effects of Annealing</td>
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<td>Temperature of Tin Oxide Electron Transport Layers on the Hysteresis of</td>
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<td>12.30</td>
<td>Hatton, Ross A. (University of Warwick) Enhancing the Efficiency and Stability</td>
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<td>of CsSnI3 Perovskite Photovoltaics</td>
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<td>12.45</td>
<td>Mortan, Claudiu (TU Darmstadt, Surface Science) Perovskite Solar Cells: From</td>
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<td>Lead (Pb) to Tin (Sn). Spin-coating and Flash Evaporation</td>
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**13.00 - 15.00**

**Lunch**
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<td>General H2</td>
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<td>Qi, Yabing (Okinawa Institute of Science and Technology Graduate University)</td>
<td>Surface and Interface Aspects of Organic-inorganic Halide Perovskite Solar Cells</td>
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<td>15.30</td>
<td>General H2</td>
<td>Salón de Actos A</td>
<td>Lovrinic, Robert (Technische Universität Braunschweig)</td>
<td>Vibrations in Methylammonium Lead Halide Perovskites: Implications for Electronic Properties and Chemical Analysis</td>
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<td>Momblona, Cristina (Universitat de València)</td>
<td>Highly Efficient Vacuum Deposited p-i-n and n-i-p Perovskite Solar Cells Employing Doped Charge Transport Layers</td>
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<td>Senders, Simon (RWTH Aachen University)</td>
<td>Fabrication of Organometal Halide Perovskite Layers via Chemical Vapor Deposition</td>
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<td>Berson, Solenn (Commissariat à l’Énergie Atomique et aux Énergies Alternatives)</td>
<td>Perovskite/Silicon Tandem Solar Cells: Elaboration of the Transparent P-type Interfacial Layer and Transparent front Electrode</td>
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<td>16.45</td>
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<td>Palazon, Francisco (Istituto Italiano di Tecnologia)</td>
<td>Fully Inorganic Perovskite Nanocrystal Inks for High-voltage Solar Cells</td>
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<td>16.00</td>
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<td>Sastré-Santos, Angela (Universidad Miguel Hernández)</td>
<td>Perylenediimides and Phthalocyanines as Components in Perovskite Solar Cells</td>
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<td>16.15</td>
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<td>Hadipour, Afshin (IMEC)</td>
<td>Solution-processed Metal Oxide Based Charge Extraction Buffer Layers at low Temperatures for Efficient and Stable Perovskite Solar Cells</td>
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<td>Molina-Ontoria, Agustin (IMDEA Nanociencia)</td>
<td>Molecular Engineering of Thiophene-rich Hole. Transporting Materials for Perovskite Solar Cells</td>
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<td>16.45</td>
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<td>Shi, Dong (University of Electronic Science and Technology of China)</td>
<td>Enhanced Photovoltaic Merits in Perovskites and Spiro-OMeTAD Single Crystals</td>
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<td>4563</td>
<td>Physical Modeling of Hysteretic Behavior in I-V Curves of Perovskite Solar Cells</td>
<td>Ludmila Cojocaru, Satoshi Uchida, Piyankarage V. V. Jayaweera, Shoji Kaneko, Jotaro Nakazaki, Takaya Kubo, Hiroshi Segawa</td>
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<td>4564</td>
<td>New designs of 2-D Lead iodide perovskites</td>
<td>Sudeep Maheshwari, Nicolas Renaud, Tom Savenije, Ferdinand Grozema</td>
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<td>4576</td>
<td>Blending photoactive polymer with halide perovskite as light harvesting layer for solar cells to enhance stability of devices.</td>
<td>Yaqub Rahaq</td>
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<td>4580</td>
<td>Point Defect Impact on the Electronic Structure of Perovskite CH3NH3PbI3 from First Principles Quantum Calculations</td>
<td>Gregorio García, Pablo Palacios, Ana Montijo-Alejo, Eduardo Menendez-Proupin, José Carlos Conesa, Perla Wahánón</td>
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<td>4583</td>
<td>Reproducible Hybrid Halide Perovskites Solar Cells with High Efficiencies Fabricated in Ambient Conditions by Solvent and Additives Engineering</td>
<td>Clara Aranda, Antonio Guerrero</td>
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<td>4587</td>
<td>Interfacial Reactivity Limits Perovskite Solar Cell Stability</td>
<td>Antonio Guerrero</td>
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<td>4588</td>
<td>Transformation of PbI2, PbBr2 and PbCl2 Salts into MAPbBr3 Perovskite by Halide Exchange as an Effective Method for Recombination Reduction</td>
<td>Eva M. Barea, Naemeh Aeineh, Iván Mora-Seró</td>
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<td>4594</td>
<td>Optoelectronic and Structural Effects of SnF2 on Tin Halide Perovskites</td>
<td>Satyajit Gupta, Tatyana Bendikov, Gary Hodes, David Cahen</td>
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<td>4596</td>
<td>Morphology control of CH3NH3PbI3 layers for planar perovskite solar cells</td>
<td>Markus Becker, Michael Wark</td>
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<td>4598</td>
<td>Metal to Halide Perovskite, HaP - a Novel Road to HaP Coating Directly from Pb(0) or Sn(0) films</td>
<td>Yevgeny Rakita, Satyajit Gupta, Nir Kedem, David Cahen, Gary Hodes</td>
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<td>4608</td>
<td>Light-induced crystal phase transition of lead halide perovskite: implications in the photovoltaic performance</td>
<td>Valero G. Alfonso, Rafael S. Sánchez, Elena Mas-Marzá</td>
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<td>4610</td>
<td>Surface polarization model for dynamical hysteresis in perovskite solar cells</td>
<td>Carlos Echeverría-Arrondo, Sandheep Ravishankar, Juan Bisquert</td>
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<td>4611</td>
<td>Osbel Almora, Germà García-Belmonte</td>
<td>Capacitive and Noncapacitive Hysteretic Currents in Perovskite Solar Cells</td>
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<td>4612</td>
<td>Dengyang Guo, Haotong Wei, Jinsong Huang, Tom Savenije</td>
<td>Structure Dependent Charge Carrier Dynamics in (CH3NH3)PbBr3 Single Crystals</td>
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<td>4613</td>
<td>Claudia Hartmann, Satyajit Gupta, Xeniya Kozina, Thomas Kunze, Gary Hodes, Roberto Félix, Regan G. Wilks, David Cahen, Marcus Bär</td>
<td>The chemical and electronic properties of inorganic lead-free CsSnX3 perovskites: Impact of SnF2 treatments, halide composition, and deposition route</td>
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<td>4618</td>
<td>María Gélvez-Rueda, Eline Hutter, Duyen Cao, Nicolas Renaud, Constantinos Stoumpos, Joseph Hupp, Tom Savenije, Mercouri Kanatzidis, Ferdinand Grozema</td>
<td>Charge Transport and Excited State Dissociation in 2D Hybrid Lead Halide Perovskites</td>
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<td>4619</td>
<td>Nuria Vicente, Germà García-Belmonte</td>
<td>Lead Bromide Perovskite Fast Ionic Conductor for High-Power Charge Storage Battery Anodes</td>
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<td>4626</td>
<td>Hye Ri Jung, Bich Phuong Nguyen, Trang Thi Thu Nguyen, Seokhyun Yoon, William Jo</td>
<td>Electronic Structure of MAPbBr3 Single Crystals Probed by Photoluminescence and Surface Potentials</td>
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<td>Alberto García-Fernández, Juan Manuel Bermúdez-García, Valero G. Alfonso, Zahra Moradi, Elena Mas-Marzá, Socorro Castro-García, Manuel Sanchez-Andujar, Francisco Frabegat-Santiago, María Antonia Señaris-Rodriguez</td>
<td>Large values of dielectric constant on MAPbI3 compound induced by moisture</td>
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<td>4631</td>
<td>Juan Ramon Sanchez-Valencia, Ana Borras, Jesus Idigoras, Juan Antonio Anta, Angel Barranco</td>
<td>One-Dimensional Organometal halide perovskite nanostructures fabricated by vacuum sublimation</td>
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<td>4633</td>
<td>Elnaz Ghahremanirad, Saeed Olyaee, Kambiz Abedi, Vahid Ahmadi</td>
<td>Enhanced Light Confinement in Perovskite Solar Cells by Incorporating Plasmonic Nanorings</td>
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<td>Michael Wussler, Tim Hellmann, Islam Elhelaly, Claudiu Mortan, Hans Koebler, Ralph Dachauer, Carolin Wittich, Thomas Mayer, Chittaranja Das, Wolfram Jaegermann</td>
<td>Interface studies on lead and tin based perovskite solar cells</td>
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<td>4653</td>
<td>Mmantsae Diale, Matshisa Legodi, John Rosenberg, David Cahen</td>
<td>Deep Level Transient Spectroscopy of Methylammonium lead bromide perovskite solar cells</td>
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<td>4691</td>
<td>Andrey Petrov, Alexey Tarasov, Eugene Goodlin, Michael Graetzel</td>
<td>New insight into the formation of hybrid perovskite nanowires via structure directing adducts</td>
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<td>4694</td>
<td>Luis Ono, Zafer Hawash, Sonia Raga, Emilio Juarez-Perez, Matthew Leyden, Yuichi Kato, Mikas Remeika, Shenghao Wang, Michael Lee, Andrew Winchester, Atsushi Gabe, Yan Jiang, Yabing Qi</td>
<td>Spiro-MeOTAD Hole Transport Layer in Perovskite-based Solar Cells</td>
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