

Day 1 - September 30

08.00-09.00 Welcome and Registration

Invited Lectures Session 1

09.00-09.30	IL1.1	Edward Sargent	Perovskite light emission: Materials and devices
09.30-10.00	IL1.2	Joachim Maier	Ion Transport in Hybrid Perovskites: Bulk and Interface
10.00-10.30	IL1.3	Tom Aernouts	Perovskite PV technology in an overall energy supply system

10.30-11.00 Coffee Break

11.00-11.30	IL1.4	Christophe Ballif	Perovskite-silicon multi-junction solar cells: progresses, opportunities and future market challenges
11.30-12.00	IL1.5	Sang Il Seok	α -phase stabilization of formamidinium lead iodide and trajectories for high efficiency solar cells
12.00-12.30	IL1.6	Aron Walsh	Quantum Mechanochemical Coupling in Halide Perovskites

12.30-12.45 Sponsor Presentations

12.45-14.00 Lunch

Session A1 – Contributed Talks – in Auditorium C

14.00-14.15	A1.01	Caleb Boyd	Improved Wide-Bandgap Perovskite Absorber for Perovskite-Silicon Tandem Solar Cells
14.15-14.30	A1.02	Ulrich Paetzold	Energy Yield Modelling of Perovskite-Based Tandem Photovoltaics
14.30-14.45	A1.03	Jan Christoph Goldschmidt	Perovskite silicon tandem solar cells with high-bandgap perovskite absorber exceeding 1.8 V open-circuit voltage
14.45-15.00	A1.04	Eike Köhnen	Highly Efficient Monolithic Perovskite Silicon Tandem Solar Cells: Analysing Current-Mismatch Conditions
15.00-15.15	A1.05	Elizabeth Tennyson	Evaluating the local optoelectronic response of textured perovskite/Si tandem solar cells
15.15-15.30	A1.06	Marko Jost	Designing highly efficient perovskite-based tandem solar cells
15.30-15.45	A1.07	Moritz Schultes	Minimizing Parasitic Near Infrared Absorption in Perovskite-CIGS Tandem Solar Cells
15.45-16.00	A1.08	Apolline Puaud	Junction engineering for monolithic perovskite/silicon tandem solar cells

16.00-16.30 Coffee Break

16.30-16.45	A1.09	Harrie Gorter	Upscaling Stable Perovskite Solar Modules towards R2R
16.45-17.00	A1.10	Luca Bertoluzzi	Origin of the quasi-reversible performance losses induced by prolonged reverse bias in lead halide perovskite solar cells
17.00-17.15	A1.11	Annalisa Bruno	Scalable Thermally Evaporated Perovskite Solar Cells
17.15-17.30	A1.12	Richard Swartwout	Lower Toxicity Solvents for High Speed Manufacturing

Session B1 – Contributed Talks – in Room Garden 2/3 ABC

14.00-14.15	B1.01	Ajay RamSrimath Kandada	Optical dephasing by many-body interactions of exciton polarons in 2D metal halide perovskites
14.15-14.30	B1.02	Giulia Grancini	2D/3D Hybrid Perovskite Interfaces and Physics therein for Stable and Efficient Solar Cells
14.30-14.45	B1.03	Michele Saba	Layered germanium hybrid perovskite bromides
14.45-15.00	B1.04	Hobeom Kim	Stable and Efficient Perovskite Solar Cells with 2D Perovskite as a Hole Transporting Material
15.00-15.15	B1.05	Justin Hoffman	From 2D to 1D Electronic Dimensionality in Halide Perovskites with Stepped and Flat Layers Using Propylammonium as a Spacer
15.15-15.30	B1.06	Antonio Agresti	2D material engineering for perovskite solar modules and panels
15.30-15.45	B1.07	Silvia Motti	Heterogeneous Photon Recycling and Charge Diffusion Enhance Charge Transport in Quasi-2D Lead-Halide Perovskite Films
15.45-16.00	B1.08	Laura Canil	Work Function Tuning through Self-Assembling Monolayers of Fluorinated Molecules

16.00-16.30 Coffee Break

16.30-16.45	B1.09	Davide Moia	The device physics of hybrid perovskite interfaces: equivalent circuit model
16.45-17.00	B1.10	Alexander Urban	Charge carrier dynamics in thickness-controlled halide perovskite nanoplatelets
17.00-17.15	B1.11	Carola Lampe	Polymer nanoreactors shield perovskite nanocrystals from degradation
17.15-17.30	B1.12	Wolfgang Tress	Negative Capacitance in Perovskite Solar Cells

RUMP Session 1 – in Auditorium C

17.30-17.35	R1.01	Andreas Schiller	Design and analysis of perovskite-silicon tandem solar cells by full opto-electronic simulation
17.35-17.40	R1.02	Aslihan Babayigit	Hyperspectral photoluminescence imaging of spatial inhomogeneities in multi- cation and –anion perovskite absorbers
17.40-17.45	R1.03	Erkan Aydin	Zr-doped Indium Oxide (IZRO) Transparent Electrodes for Perovskite-Based Tandem Solar Cells
17.45-17.50	R1.04	Eros Radicchi	On the way to commercialization: the making of stable and efficient quasi-2D perovskite solar cells
17.50-17.55	R1.05	Heyong Wang	Perovskite-molecule hybrid thin films for efficient and stable solution-processed light-emitting diodes
17.55-18.00	R1.06	Janardan Dagar	Alkali-Salts as Interface Modifiers in Low Temperature Solution Processed n-i-p Hybrid Perovskite Solar Cells and Modules
18.00-18.05	R1.07	Onovbaramwen Jennifer Usiobo	Using high-resolution HIM-SIMS to understand the role and distribution of a CuSCN additive in reducing the hysteresis of mesoscopic HTM-free perovskites
18.05-18.10	R1.08	Sergii Yakunin	High-resolution remote thermometry and thermography using luminescent low-dimensional tin-halide perovskites
18.10-18.15	R1.09	Suhas Mahesh	Revealing the Origin of Voltage Loss in Wide-gap Perovskite Solar Cells
18.15-18.20	R1.10	Valentina Caselli	Temperature Dependent Rotational Relaxation Times of the Organic Cation in Lead Halide Perovskites
18.20-18.25	R1.11	Wenya Song	Investigation on stability of perovskite solar cells at outdoor settings
18.25-18.30	R1.12	Xiaoxin Gao	Stability and high-efficiency perovskite solar cells: interface modification and new materials

18.30-21.00 Poster session & refreshment

21.00 End of poster session

Day 2 - October 01**08.00-09.00 Welcome and Registration****Invited Lectures Session 2**

09.00-09.30	IL2.1	Jinsong Huang	Multiple Facets Stability Issues of Metal Halide Perovskites and Mitigation Strategies
09.30-10.00	IL2.2	Alex Jen K.-Y.	Rational Design and Interface Engineering for High-Performance Perovskite and OPV/Perovskite Hybrid Solar Cells
10.00-10.30	IL2.3	Joseph M. Luther	Metal Halide Perovskites at the Nanoscale: high quality optoelectronic materials with unique distinctions from thin film perovskites

10.30-11.00 Coffee Break

11.00-11.30	IL2.4	Maria Antonietta Loi	Scalable fabrication of high-quality crystalline and stable FAPbI ₃ thin films
11.30-12.00	IL2.5	Barry P. Rand	Surface Passivation and Stability of Metal Halide Perovskite LEDs
12.00-12.30	IL2.6	Tae-Woo Lee	Boosting Efficiency of Polycrystalline Perovskite Light Emitting Diodes by Nanograin Engineering

12.30-12.45 Sponsor Presentations**12.45-14.00 Lunch****Session A2 – Contributed Talks – in Auditorium C**

14.00-14.15	A2.01	Dane deQuilettes	GridEdge Solar- Scientific Insights into Scaling Perovskite Technology
14.15-14.30	A2.02	Carolin Rehermann	Understanding film formation of MAPb(I _{1-x} Br _x) ₃ via optical in-situ methods and its influence on thin film optoelectronic properties
14.30-14.45	A2.03	Dieter Neher	Probing Charge Carrier Dynamics in Efficient Perovskite Solar Cells
14.45-15.00	A2.04	Jan Herberich	Huge VOC increase despite almost constant radiative recombination in planar CsFAPbI ₃ solar cells
15.00-15.15	A2.05	Jose Marquez Prieto	Investigation of γ -CsPbI ₃ perovskites from coevaporation: low temperature deposition vs. high temperature annealing
15.15-15.30	A2.06	Ashley Marshall	Exploring the Non-cubic Perovskite Phases of CsPbI ₃
15.30-15.45	A2.07	Pietro Caprioglio	Interfacial Design through Poly-Ionic Liquid Surface Modification in Efficient pin Perovskite Solar Cells
15.45-16.00	A2.08	Wanchun Xiang	Europium-Doped CsPbI ₂ Br for Stable and Highly Efficient Inorganic Perovskite Solar Cells

16.00-16.30 Coffee Break

16.30-16.45	A2.09	Isabella Poli	Graphite-protected CsPbBr ₃ perovskite photoanodes for oxygen evolution in water
16.45-17.00	A2.10	Diego Di Girolamo	Interfaces and Bulk. The Multivariate Effect of the Electrical Bias on Perovskite Film and on Perovskite Solar Cells
17.00-17.15	A2.11	Krzysztof Galkowski	Excitonic Properties of Low Bandgap Lead-Tin Halide Perovskites
17.15-17.30	A2.12	Mathias Uller Rothmann	Reliable Atomic-Resolution Scanning TEM Observations of the Nanoscopic Properties of Hybrid Perovskite Thin Films
17.30-17.45	A2.13	Lucie McGovern	Quantification of Ion Migration in MAPbBr ₃ solar cells with varying grain size
17.45-18.00	A2.14	Tom Savenije	Multi Bandgap Transitions Revealed by Two-Photon Absorption Spectra in Metal Halide Perovskites

Session B2 – Contributed Talks – in Room Garden 2/3 ABC

14.00-14.15	B2.01	Edoardo Mosconi	Computational modelling of HTM/Perovskite interface: The role of methylammonium cation
14.15-14.30	B2.02	Saiful Islam	Partial A-Cation Substitution in Iodide Perovskites: Atomic-Scale Insights Into Structural Distortion, Iodide Ion Transport and Pressure Effects
14.30-14.45	B2.03	Nadège Marchal	Lead-halide perovskites meet donor-acceptor charge transfer complexes
14.45-15.00	B2.04	Mikael Kepenekian	Critical role of interfaces in halide perovskite-based devices
15.00-15.15	B2.05	Arup Mahata	Interface Engineering and Polaron Formation in 3D, 2D, and 3D/2D Mix-dimensional Perovskites
15.15-15.30	B2.06	Matthew Wolf	Band-Electron vs. Polaron Mobility in Metal-Halide Perovskites
15.30-15.45	B2.07	Damiano Ricciarelli	Ab initio defect chemistry of tin-halide perovskites: Origin of p-doping and possible material degradation pathways
15.45-16.00	B2.08	Keith McKenna	First principles modelling of grain boundaries in (FA/Cs)Pb(I/Br) ₃ perovskite solar absorbers

16.00-16.30 Coffee Break

16.30-16.45	B2.09	Alex Barker	Competing photochemical reactions can be controlled to stabilise perovskite based optoelectronic devices
16.45-17.00	B2.10	Maksym Kovalenko	Perovskite Nanocrystals as Classical and Quantum Light Sources
17.00-17.15	B2.11	Jian Wang	Contact Improvement Rationales for Perovskite Solar Cells
17.15-17.30	B2.12	Alexey Tarasov	Room-temperature melts based perovskite processing: polyiodide-based approach as a mirror strategy to amine-based methods
17.30-17.45	B2.13	Dominik Kubicki	Atomic-level interaction between perovskites and passivation agents elucidated by multinuclear solid-state NMR
17.45-18.00	B2.14	Martin Stollerfoht	Quantification of bulk and interfacial recombination currents under open-circuit conditions of p-i-n and n-i-p type perovskite solar cells

18.00-19.00 Poster session & refreshment**20.00-23.00 Social Dinner**

Day 3 - October 02**08.00-09.00 Registration****Invited Lectures Session 3**

09.00-09.30	IL3.1	Jacky Even	Excitons, phonons and confinement effects in halide perovskites: recent results
09.30-10.00	IL3.2	Samuel Stranks	Local Multi-Modal Approaches to Understand Halide Perovskite Device Operation
10.00-10.30	IL3.3	Henry Snaith	Understanding optoelectronic processes and improving the efficiency and stability of perovskite solar cells

10.30-11.00 Coffee Break

11.00-11.30	IL3.4	Henk Bolink	Vapor Deposited Perovskites and their integration into Solar Cells
11.30-12.00	IL3.5	Antonio Abate	How much should we worry about lead from halide perovskites?
12.00-12.30	IL3.6	Jianpu Wang	Perovskite LEDs: High Efficiency and High Brightness

12.30-12.45 Sponsor Presentations**12.45-14.00 Lunch****Session A3 – Contributed Talks – in Auditorium C**

14.00-14.15	A3.01	Bernard Wenger	Light Soaking Effects and Passivation in Metal Halide Perovskites
14.15-14.30	A3.02	Marion Flatken	Structural Properties of Perovskite Layers in High-Performance Solar Cells
14.30-14.45	A3.03	Rachel Beal	Structural and mechanistic origins of light-induced phase segregation in organic-inorganic halide perovskite photovoltaic materials
14.45-15.00	A3.04	Wenxin Mao	Towards Single-crystalline Perovskite Devices
15.00-15.15	A3.05	Emanuele Smecca	Fully solvent-free preparation of MAPbI ₃ films for photovoltaic application
15.15-15.30	A3.06	Jeremie Werner	Improvement in the absorber and its interfaces to yield efficient and stable low-bandgap 1.2 eV tin-lead perovskite solar cells
15.30-15.45	A3.07	Ella Wassweiler	Fabrication of Perovskite Solar Cells Using Vapor Transport Deposition
15.45-16.00	A3.08	Laura Granados	Direct determination of total hemispherical emittance of perovskite and silicon solar cells

16.00-16.30 Coffee Break

16.30-16.45	A3.09	Ana María Igual Muñoz	Sublimed tin-lead perovskite for energy harvesting applications
16.45-17.00	A3.10	Min Kim	Improving Stability of Lead Halide Perovskite Solar Cells based on 3D/2D Multi-dimensional Perovskite
17.00-17.15	A3.11	Ening Gu	Robot-based high throughput screening of antisolvents applied in precipitation of lead halide perovskites
17.15-17.30	A3.12	Maurizio Monti	Influence of lead and tin concentration on hot carrier cooling in mixed lead-tin halide perovskite semiconductors
17.30-17.45	A3.13	Tadas Malinauskas	Long-term Instability of Doped Hole Transporting Materials and Means to Circumvent It via Hole-selective Monolayer
17.45-18.00	A3.14	Junke Wang	Fabrication and characterization of efficient low bandgap perovskite solar cells by a facial two-step solution process

Session B3 – Contributed Talks – in Room Garden 2/3 ABC

14.00-14.15	B3.01	Sarah Deumel	Hybrid inorganic-organic perovskites as direct converter for medical X-Ray imaging
14.15-14.30	B3.02	Dávid Forgács	Artificial light harvesting perovskite modules for IoT applications – a promising market entry point
14.30-14.45	B3.03	Julie Roger	Flexible and stable laminated perovskite solar cells
14.45-15.00	B3.04	Philipp Brenner	Towards room temperature continuous wave perovskite lasers
15.00-15.15	B3.05	Gebhard Matt	High performance X-ray to current converter fabricated directly on substrate via melting of a inorganic metal-halide perovskite
15.15-15.30	B3.06	Giulia Longo	Co-evaporation of double-perovskites. An alternative deposition technique for the preparation and characterization of novel semiconductor materials
15.30-15.45	B3.07	Weidong Xu	Rational molecular passivation for perovskite light-emitting diodes
15.45-16.00	B3.08	Francesco Quochi	Photophysics of ytterbium(III) in the double perovskite Cs ₂ NaYbCl ₆

16.00-16.30 Coffee Break

16.30-16.45	B3.09	Michael F. Toney	Evidence for Local, Dynamic Tetragonal Domains within Cubic MAPbI ₃
16.45-17.00	B3.10	Dmitri Yakovlev	Spin-flip Raman scattering of carriers and excitons in CsPbBr ₃
17.00-17.15	B3.11	Amran Al-Ashouri	Universal Monolayer Contacts Form Lossless Hole-Selective Interfaces in Perovskite Solar Cells
17.15-17.30	B3.12	Satoshi Uchida	Crystal Phase Control Toward The Perovskite Superlattice Solar Cells
17.30-17.45	B3.13	Madeleine Laitz	Room-Temperature Strong Light-Matter Interactions in Hybrid Perovskites
17.45-18.00	B3.14	Marcel Roß	Influence of hole-selective contacts for Perovskite Solar Cells prepared by direct Co-Evaporation

18.00-18.30 Awards announcements / Closing