International Conference on Perovskite Thin Film Photovoltaics, Photonics and Optoelectronics (ABXPV18PEROPTO)

Perovskite Thin Film Photovoltaics (ABXPV18). 27-28 Feb

Rennes, France, 2018 February 27th - 28th
Conference Chairs: Jacky Even and Aditya Mohite

Conference Program

February 27th - Day 1 (Tuesday)	
08:45 - 08:50	**Announcement of the day**
08:50 - 09:00	**Opening ABXPV**
	Session G1: GOTSolar Session Chair: Jacky Even Room: Salon Merlin
09:00 - 09:30 Session-I1	Adélio Mendes *(FEUP - Faculdade de Engenharia da Universidade do Porto, University of Porto)* New Advancements in Perovskite Solar Cells
09:30 - 10:00 Session-I2	Michael Graetzel *(Laboratory of Photonics and Interfaces Ecole Polytechnique Fédérale de Lausanne, Suisse)* Metal halide perovskites as powerful light harvesters for the generation of electricity and fuels from sunlight
10:00 - 10:30 Session-I3	Michael Saliba *(École Polytechnique Fédérale de Lausanne, CH)* Incorporation of multiple cations for Highly Efficient, Phase and Temperature Stable Perovskite Semiconductors
10:30 - 11:00	**Coffee Break**
11:00 - 11:30 Session-I4	Wanyi Nie *(Los Alamos National Laboratory, Los Alamos, NM 87545, USA)*, Hsinhan Tsai, Reza Asadpour, Jean-Christophe Blancon, Jacky Even, Pulickel Ajayan, Muhammad Alam, Mercouri Kanatzidis, Aditya Mohite The critical role of structural dynamics on the optoelectronic device performance in hybrid perovskites
11:30 - 12:00 Session-I5	Constantinos Stoumpos *(Northwestern University, Department of Chemistry)* Halide Perovskites: Unconventional High-Performance Semiconductors
12:00 - 12:30 Session-I6	Yixin Zhao *(Shanghai Jiao Tong University, CN)* High Performance All-inorganic CsPbI3 Perovskite Stabilized by (110) Oriented 2D Perovskite
12:30 - 12:40	**Industrial talk ZAHNER**
	Session A1 Chair: Claudine Katan Room: Salon Morgane
14:00 - 14:15 A1-O1	Shuyan Shao *(Zernike Institute for Advanced Materials, University of Groningen, Nijenborgh 4, 9747 AG, The Netherlands)*, Jian Liu, Giuseppe Portale, Hong-Hua Fang, Graeme R. Blake, Gert H. ten Brink, L. Jan Anton Koster, Maria Antonietta Loi Sn-based Hybrid Perovskite Solar Cells with 9% Efficiency
14:15 - 14:30 A1-O2	Eduardo Menéndez-Proupin *(Universidad de Chile)*, Ana L. Montero-Alejo, Pablo Palacios, Perla Wahnón, José C. Conesa Hole-electron asymmetry in diffusion pathways induced by ferroelectric nanodomains in CH3NH3PbI3
14:30 - 14:45 A1-O3	Maurizio Cossi *(Università del Piemonte Orientale "A. Avogadro")*, Alberto Fraccarollo, Leonardo Marchese Ab Initio Design of 2D Hybrid Organohalide Perovskites with Tunable Band Gap
14:45 - 15:00 A1-O4	Lionel Hirsch *(CNRS/Univ. Bordeaux)*, Yan-Fang Chen, Yu-Tang Tsai, Dario M. Bassani Experimental evidence for proton tunneling in methylammonium lead triiodide perovskites

15:00 - 15:15 A1-O5	Soline Boyer-Richard *(Laboratoire FOTON, INSA, Université Rennes, F35708 Rennes, France)*, Laurent Pédesseau, Arthur Marronnier, Guido Roma, Boubacar Traoré, Claudine Katan, Yvan Bonnassieux, Jean-Marc Jancu, Ram Seshadri, Constantinos Stoumpos, Mercouri Kanatzidis, Jacky Even Tight-Binding modeling of CsPbI3 in several perovskite phases
15:15 - 15:30 A1-O6	Hsinhan Tsai *(Los Alamos National Laboratory, Los Alamos, NM 87545, USA)*, Wanyi Nie, Jean-Christophe Blancon, Constanrinos C. Stoumpos, Chan M.M. Soe, Jinkyoung Yoo, Sergei Tretiak, Jacky Even, Aditya Sadhanala, Jered Crochet, Giovanni Azzellino, Roberto Brenes, Pulickel M. Ajayan, Vladimir Bulovic, Samuel D. Stranks, Richard Friend, Mercuri G. Kanatzidis, Aditya Mohite Stable Light-Emitting Diodes Using Phase-Pure Ruddlesden-Popper Layered Perovskites
15:30 - 15:45 A1-O7	Antonin Leblanc *(University of Angers, CNRS UMR 6200, MOLTECH-Anjou, Linear Conjugated Systems)*, Nicolas MERCIER, Magali ALLAIN, Jens DITTMER, Vincent FERNANDEZ, Thierry PAUPORTE Lead and iodide deficient (CH3NH3)PbI3, d-MAPI: the bridge between 2D and 3D hybrid perovskites
15:45 - 16:00 A1-O8	Davide Bartesaghi *(1 Department of Chemical Engineering, Delft University of Technology, Delft, Netherlands)*, Aniruddha Ray, Benjamin Feleki, Martijn Wienk, Rene Janssen, Tom Savenije Synthesis and characterization of mixed-metal MAPb1-xMnxI3
	Session B1 Chair: Wanyi Nie Room: Salon Merlin
14:00 - 14:15 B1-O1	Bernard Geffroy *(LICSEN, NIMBE, CEA, CNRS, Université Paris-Saclay, CEA Saclay, F-91191 Gif-sur-Yvette, France)*, Heejae Lee, Sofia Gaiaschi, Patrick Chapon, Arthur Marronnier, Denis Tondelier, Yvan Bonnassieux, Jean-Eric Bourée Effect of Halide ion migration on current-voltage hysteresis in CH3NH3PbI3-xClx based perovskite solar cells
14:15 - 14:30 B1-O2	Iván Mora-Seró *(Institute of Advanced Materials, Universitat Jaume I, Spain)* Hole Selective Contacts in Perovskite Solar Cells
14:30 - 14:45 B1-O3	Mojtaba Abdi-Jalebi *(Cavendish Laboratory, University of Cambridge, JJ Thomson Avenue, Cambridge CB3 0HE, United Kingdom)*, Zahra Andaji-Garmaroudi, Stefania Cacovich, Giorgio Divitini, Samuel D. Stranks, Richard H. Friend Enhanced optoelectronic quality of metal halide perovskite via additive engineering
14:45 - 15:00 B1-O4	Amrita Yasin *(SPECIFIC IKC, College of Engineering, University of Swansea, Swansea, U.K)*, Adam Pockett, Catherine De Castro, James McGettrick, Cecile Charbonneau Modification of TiO2/CH3NH3PbI3 interface with KCl, KI, or KBr in planar perovskite solar cells
15:00 - 15:15 B1-O5	Hong-Hua Fang *(Zernike Institute for Advanced Materials, University of Groningen)*, Sampson Adjokatse, Shuyan Shao, Jacky Even, Maria Loi Long-lived Hot-carrier Emission and Large Blue Shift in the Thin Film of FASnI3
15:15 - 15:30 B1-O6	Alexey Tarasov *(3Laboratory of New Materials for Solar Energetics, Faculty of Materials Science, Lomonosov Moscow State University (MSU))*, Ivan Turkevych, Said Kazaoui, Nikolai Belich, Aleksei Grishko, Sergey Fateev, Andrey Petrov, Michael Graetzel, Eugene Goodilin Strategic advantages of reactive polyiodide melts for scalable perovskite photovoltaics
15:30 - 15:45 B1-O7	Ihteaz Muhaimeen Hossain *(Institute of Microstructure Technology, Karlsruhe Institute of Technology)*, Florian Mathies, Tobias Abzieher, Somayeh Moghadamzadeh, Bryce S. Richards, Uli Lemmer, Damien Hudry, Ulrich W. Paetzold, Afshin Hadipour Printable Low-temperature TiO2 Nanoparticles for High Efficiency Stable Perovskite Solar Cells
15:45 - 16:00 B1-O8	Dibyajyoti Ghosh *(Physics, University of Bath)* Good Vibrations: Locking of Octahedral Tilting in Mixed-Cation Iodide Perovskites for Solar Cells
February 28th - Day 2 (Wednesday)	
	Session G2 Chair: Aditya Mohite Room: Salon Merlin

09:00 - 09:30 G2-I1	Maria Antonietta Loi *(Zernike Institute for Advanced Materials, University of Groningen, Nijenborgh 4, 9747 AG, The Netherlands)* Sn-based Hybrid Perovskite Solar Cells from solar cells to hot electrons
09:30 - 10:00 G2-I2	Qing Shen *(The University of Electro-Communications, Japan)*, Yuhei Ogomi, Chao Ding, Taro Toyoda, Kenji Yoshino, Takashi Minemoto, Shuzi Hayase Effects of Interface Engineering on Photoexcited Carrier Dynamics and Photovoltaic Performance in Perovskite Solar Cells
10:00 - 10:30 G2-I3	Lioz Etgar *(Instiute of Chemistry, Casali Center for Applied Chemistry, The Hebrew University of Jerusalemt)* Two Dimensional organic-inorganic perovskite from nanostructures to solar cells
10:30 - 11:00	**Coffee Break**
11:00 - 11:30 G2-I4	Aldo Di Carlo *(CHOSE – Centre for Hybrid and Organic Solar Energy, University of Rome Tor Vergata, Roma, Italy)* Scaling perovskite cells to large area modules
11:30 - 12:00 G2-I5	Satishchandra Ogale *(Indian Institute of Science Education and Research (IISER) Pune)* Molecular Engineering of the dimensionality and properties of hybrid perovskite systems in search of novel functionalities and applications
12:00 - 12:30 G2-I6	Matthieu Manceau *(CEA-LITEN ; Univ. Grenoble Alpes)*, Solenn Berson, Ibrahim Bulut, Noëlla Lemaître Processing of Large area Perovskite-based Solar Modules
12:30 - 12:40	_____
	Session A2 Chair: Satishchandra Ogale Room: Salon Morgane
14:00 - 14:15 A2-O1	Iain Hamilton, Matyas Daboczi, Iain Baikie, Ji-Seon Kim *(Department of Physics and Centre for Plastic Electronics, Imperial College London, London, SW7 2AZ, UK.)* Energetics and Surface Photovoltage of Perovskites for Thin Film Photovoltaics
14:15 - 14:30 A2-O2	Masanao Era *(Saga University)*, Kazuhiro Ema Optical and Electroluminescent Properties of Lead Iodide-Based Layered Perovskite Self-Organized Quantum-Well
14:30 - 14:45 A2-O3	Hao-Yi Wang *(Department of Chemistry, Renmin University of China, Beijing 100872, P. R. China)*, Yi Wang, Man Yu, Yujun Qin, Xi-Cheng Ai, Jian-Ping Zhang Interpretation of the Biphasic Charge Carrier Recombination Process Observed in Mesoporous-Structured Perovskite Solar Cells
14:45 - 15:00 A2-O4	Shrabani Panigrahi *(Departamento de Ciência dos Materiais, CENIMAT/i3N, Faculdade de Ciências e Tecnologia–Universidade Nova de Lisboa and CEMOP/Uninova, Caparica, Portugal.)*, Santanu Jana, Tomás Calmeiro, Daniela Nunes, Rodrigo Martins, Elvira Fortunato Cross-sectional Analysis of Surface Potential inside Solar Cells Using Kelvin Probe Force Microscopy
15:00 - 15:15 A2-O5	Clara Aranda *(Institute of Advanced Materials, Universitat Jaume I, ES)*, Juan Bisquert, Antonio Guerrero High open – circuit voltatge of pure bromide perovskite solar cells using spiro-ometad as a hole-selective material
15:15 - 15:30 A2-O6	Samuel D. Stranks *(Cavendish Laboratory, University of Cambridge, JJ Thomson Avenue, Cambridge CB3 0HE, United Kingdom)*, Mojtaba Abdi-Jalebi, Zahra Andaji-Garmaroudi, Stefania Cacovich, Camille Stavrakas, Eline H. Hutter, Tom J Savenije, Giorgio Divitini, Richard H. Friend Passivation approaches to eliminate non-radiative losses and inhibit ion migration in halide perovskites
15:30 - 15:45 A2-O7	Sampson Adjokatse *(Zernike Institute for Advanced Materials, University of Groningen, Nijenborgh 4, 9747 AG, The Netherlands)*, Hong-hua Fang, Jane Kardula, Maria Antonietta Loi Effect of substrate layer and Device Architecture on Photophysics and Device Performance of Planar Perovskite Solar Cells
15:45 - 16:00 A2-O8	Satoshi Uchida *(The University of Tokyo)*, Tae Woong Kim, Ludmila Cojocaru, Takashi Kondo, Hiroshi Segawa A new discovery of double phase coexistence inside the perovskite solar cells

	Session B2 Chair: Maria Antonietta Loi Room: Salon Merlin
14:00 - 14:15 B2-O1	Simone Mastroianni *(Fraunhofer Institute for Solar Energy Systems, Heidenhofstrasse 2, 79110 Freiburg, Germany)*, Lukas Wagner, Lakshmi S. Subramaniam, Sijo Chacko, Kübra Yasaroglu, Wolfram Kwapil, Laura D. Mundt, Martin .C. Schubert, Thomas Kroyer, Andreas Hinsch Optimization of electron selective layer and perovskite crystallization for efficient outdoor and indoor light harvesting in graphite-based perovskite solar cells
14:15 - 14:30 B2-O2	James McGettrick *(Specific, Swansea University)*, Trystan Watson, Katherine Hooper, Adam Pockett, Matthew Carnie, Joel Troughon Perovskite Materials for Scale-Up: Surface Analysis of a Range of Scalable Architectures
14:30 - 14:45 B2-O3	Isabel Mesquita *(LEPABE, Departamento de Engenharia Química, Universidade do Porto – Faculdade de Engenharia, Rua Dr. Roberto Frias s/n 4200-465 Porto, Portugal)*, Luísa Andrade, Adélio Mendes Temperature influence in the perovskite solar cell operation
14:45 - 15:00 B2-O4	Pia Dally *(CEA Liten/DTS/SMPV/LMPO)*, Noella Lemaitre, Stéphanie Pouget, Stéphane Cros, Serge Gambarelli, Solenn Berson Advanced characterization of Perovskite systems: Understanding and improving the performance and stability of photovoltaic devices
15:00 - 15:15 B2-O5	Dengyang Guo *(Chemical Engineering, Optoelectronic Materials, Delft University of Technology, Van der Maasweg 9, 2629 HZ Delft, The Netherlands)*, Zahra Garmaroudi, Samuel Stranks, Tom Savenije How Charge Dynamics Change in Mixed Halide Perovskites on Light Soaking
15:15 - 15:30 B2-O6	Pietro Caprioglio *(University of Potsdam Institut für Physik und Astronomie Physik weicher Materie, Potsdam)*, Fengshuo Zu, Christian M. Wolff, Martin Stolterfhot, Norbert Koch, Bernd Rech, Steve Albrecht, Dieter Neher Reducing recombination and enhancing open circuit voltage by Strontium-alloying in multiple cation perovskite solar cells
15:30 - 15:45 B2-O7	Raphaëlle Belchi *(NIMBE, CEA, CNRS, Université Paris-Saclay, CEA Saclay 91191 Gif-sur-Yvette, France)*, Aurélie Habert, Nathalie Herlin-Boime, Johann Bouclé TiO2/graphene-based nanocomposite as electron transport layer for perovskite solar cells: synthesis and properties
15:45 - 16:00 B2-O8	F. Javier Ramos *(IPVF, Institut Photovoltaïque d'Ile-de-France, 30 RD 128, 91120 Palaiseau, France)*, Sebastien Jutteau, Jorge Posada, Amelle Rebai, Thomas Guillemot, Adrien Bercegol, Romain Bodeux, Nathanaelle Schneider, Nicolas Loones, Daniel Ory, Cedric Broussillou, Laurent Lombez, Jean Rousset A 22.42 % 4-terminal perovskite/silicon tandem device with a 3 % boost over commercially available silicon cell.
16:00 - 16:15	**Closing ABXPV**
16:15 - 17:45	**Poster session ABXPV and PEROPTO**
17:45 - 18:00	**Poster awards ceremony**

Poster Contribution

004	Shuxia Tao *(Applied Physics, Eindhoven University of Technology)*, Jie Cao, Ni Zhao, Peter Bobbert Atomistic View of Interstitial Occupation of Small Alkali Cations in Perovskites and Its Impact on Ion Migration
006	Afonso da Cunha Ferreira *(Laboratoire Léon Brillouin, CEA-CNRS, Université Paris-Saclay, CEA Saclay, 91191 Gif-sur-Yvette, France)*, Antoine Létoublon, Serge Paofai, Stéphane Raymond, Claude Ecolivet, Benoit Rufflé, Stéphane Cordier, Claudine Katan, Makhsud Saidaminov, Ayan Zhumekenov, Osman Bakr, Philippe Bourges, Jacky Even Elastic softness of hybrid lead halide perovskites
016	Manon Spalla *(LEPMI / Université Savoie Mont Blanc)*, Emilie Planes, Lara Perrin, Muriel Matheron, Matthieu Manceau, Solenn Berson, Lionel Flandin Perovskite solar cell intrinsic stability: elucidation of degradation processes using a combination of characterization techniques

022	Man Yu *(Department of Chemistry, Renmin University of China, Beijing 100872, P. R. China)*, Hao-Yi Wang, Xi-Cheng Ai, Yujun Qin, Jian-Ping Zhang Power Output, Carrier Dynamics, Hysteresis Studies of Perovskite Solar Cells
026	Sudeep Maheshwari *(Department of Chemical Engineering, Optoelectronic Materials, TU Delft, Julianalaan 136, 2628 BL Delft, The Netherlands)*, Nicolas Renaud, Tom Savenije, Ferdinand Grozema Computational design of novel 2D lead iodide perovskites
035	Boubacar Traore *(Institut des Sciences Chimiques de Rennes (ISCR), UMR 6226, CNRS, Université de Rennes 1, Ecole Nationale Supérieure de Chimie de Rennes INSA Rennes, France)*, Laurent Pedesseau, Linda Assam, Xiaoyang Che, Jean-Christophe Blancon, Hsinhan Tsai, Wanyi Nie, Constantinos C. Stoumpos, Mercouri G. Kanatzidis, Sergei Tretiak, Aditya D. Mohite, Jacky Even, Mikaël Kepenekian, Claudine Katan Composite approach towards layered hybrid perovskites: Implications on band alignment and quantum and dielectric confinements
040	Yong Huang *(UMR FOTON CNRS 6082, INSA, 35708 Rennes, France)*, Sigalit Aharon, Alexandre Gheno, Sylvain Vedraine, Laurent Pedesseau, James Connolly, Claudine Katan, Mikaël Kepenekian, Jean-Philippe Burin, Oliver Durand, Johann Bouclé, Lioz Etgar, Jacky Even, Alain Rolland Numerical investigation of the effect of interface conditions in HTM-free, printable WOx based and inverted perovskite solar cells
047	Alain Rolland *(UMR FOTON CNRS 6082, INSA, 35708 Rennes, France)*, L. Pédesseau, Y. Huang, S. Wang, D. Sapori, C. Cornet, O. Durand, J. Even, M. Kepenekian, C. Katan Computational design of high performance hybrid perovskite on silicon 2-T tandem solar cells based on a tunnel junction
054	Merabet Boualem *(University of Mascara)* Effects of Bismuth Incorporation in CsPbI3 on All Inorganic Perovskite Solar Cells Performances
061	Li-Li Gao *(Xi'an Jiaotong University)*, Guan-Jun Yang Small molecule-driven directional movement enabling pin-hole free perovskite film via fast solution engineering
072	Carlos Echeverría-Arrondo *(Institute of Advanced Materials, Universitat Jaume I, Spain)*, Juan Bisquert Surface Polarization by Schottky Disorder in Perovskite Solar Cells from First Principles
090	N. H. Nickel *(Helmholtz-Zentrum Berlin für Materialien und Energie GmbH, Institut für Silizium Photovoltaik)*, F. Lang, V. V. Brus, J. Rappich Light-induced degradation of methylammonium and formamidinium lead iodide perovskites
092	Vera La Ferrara *(Energy Technologies Department, Research Centre ENEA, P. le E. Fermi, I-80055 Portici, Italy)*, Antonella De Maria, Gabriella Rametta, Marco Della Noce, Lucia Vittoria Mercaldo, Carmela Borriello, Annalisa Bruno, Paola Delli Veneri Improvement of performance for ZnO nanorods/AZO photoanode based perovskite solar cells fabricated in ambient air
093	Yuiga Nakamura *(Department of Materials Engineering, The University of Tokyo, Japan)*, Tomonori Matsushita, Shu Yamaguchi, Takashi Kondo Defect chemistry analysis on CH3NH3PbI3 toward conductivity control of lead-halide perovskites
095	Hilal Balout, Marcelo Andres Carignano, Laurent Le Pollès, Claire Roiland, Eric Furet *(Institut des Sciences Chimiques de Rennes (ISCR), UMR 6226, CNRS, Université de Rennes 1, Ecole Nationale Supérieure de Chimie de Rennes INSA Rennes, France)*, Jacky Even, Claudine Katan CH3NH3+ Dynamics in CH3NH3PbBr3 by Combining Solid-State NMR and Molecular Dynamics Calculations
097	Hong ZHANG *(Department of Electrical and Electronic Engineering, The University of Hong Kong, Pok Fu Lam Road, Hong Kong SAR, China)*, Jiaqi Cheng, Dan Li, Francis Lin, Jian Mao, Chunjun Liang, Alex K.-Y. Jen, Michael Grätzel, Wallace Choy High-performance and stable perovskite solar cells achieved by a new all room-temperature solution-process
099	Yoshiki Uematsu *(Sophia University)*, Masahiro Yoshizawa-Fujita, Yuko Takeoka, Masahiro Rikukawa Perovskite Solar Cells Using Novel Amines (IV) -Modification of Photovoltaic Cells by Adding Acetamidinium Cation-
100	Ryosuke Arai *(Sophia University)*, Masahiro Yoshizawa-Fujita, Yuko Takeoka, Masahiro Rikukawa Functionalization of two-dimensional perovskites by incorporating carboxy group

101	azin babaei *(Instituto de Ciencia Molecular, Universidad de Valencia, C/ Catedrático J. Beltrán 2, 46980 Paterna, Spain)*, Maria-Grazia La-Placa, Yousra El-Ajjouri, Laura Martínez-Sarti, Pablo p.boix, Michele Sessolo, Henk J. Bolink *(Instituto de Ciencia Molecular, Universidad de Valencia, C/ Catedrático J. Beltrán 2, 46980 Paterna, Spain)* Vacuum-Processed Methylammonium Lead Halide Light-Emitting Diodes
103	Jennifer Dewalque *(GREENMAT - CESAM, University of Liège)*, Damien Baron, Gilles Spronck, Audrey Schrijnemakers, Anthony Maho, Pierre Colson, Rudi Cloots, Jérôme Loicq, Catherine Henrist Opal-like photoanodes with photonic effects in macroporous perovskite solar cells
105	Karla Jiménez-Meza *(Universidad de Chile)*, Eduardo Menéndez-Proupin *(Universidad de Chile)* Theoretical study of the band alignment of the Cu2O/CH3NH3PbI3 interface
106	Junke Jiang *(Center for Computational Energy Research, Department of Applied Physics, Eindhoven University of Technology)*, Peter A. Bobbert, Shu Xia Tao Influence of Ion-Exchange on Lead-Free Inorganic Sn Halide Perovskites
107	Enrico Cescon *(University of Padova, Department of Chemical Sciences, Via Marzolo 1, 35131 Padova, Italy)*, Francesco Lamberti, Moreno Meneghetti, Lorenzo Franco EPR investigation on the origin of suppressed hysteresis in laser-ablated hybrid perovskite nanoparticles
108	Fiona McGrath *(University of Limerick)*, Kevin Ryan Lead free, tin and germanium perovskites
109	Audrey Schrijnemakers *(CESAM-GREENMAT, University of Liege, Allée du 6 Aout 13, Sart-Tilman, 4000 Liege, Belgium.)*, jennifer Dewalque, Gilles Spronck, Anthony Maho, Pierre Colson, Rudi Cloots Spray coating as scalable deposition technique of TiO2 blocking layer to boost the perovskite solar cell performances
110	Philipp Tockhorn *(Helmholtz-Zentrum Berlin, Institute for Silicon Photovoltaics, Berlin)*, Ganna Chistiakova, Mathias Mews, Lars Korte, Steve Albrecht, Bernd Rech Comparative Study of differently processed Tin Oxide Layers in regular perovskite solar cells
114	Ferdinand Lédée *(Laboratoire Aimé Cotton, CNRS, Université Paris-Sud, ENS Paris-Saclay, Université Paris-Saclay, France)*, Gaëlle Trippé-Allard, Hiba Diab, Pierre Audebert, Damien Garrot, Jean-Sébastien Lauret, Emmanuelle Deleporte Monocrystalline thin films of low-dimensionnal hybrid perovskites by rapid vapor-assisted process
115	Samy Almosni *(Research Center for Advanced Science and Technology,The University of Tokyo, Komaba 4-6-1, Meguro-ku, Tokyo 153-8904, Japan)*, Takeru Bessho, Satoshi Uchida, Takaya Kubo, Hiroshi Segawa, Tang Zeguo Hysteresis-less and efficient planar perovskite solar cells using amorphous TiO2
117	Piotr Krupinski *(Institute of Physical Chemistry, Polish Academy of Sciences, Warszawa, Poland.)*, Anna M. Cieslak, Daniel Prochowicz, Janusz Lewinski Challenges in design and synthesis of zinc oxide nanocrystalline materials for applications in planar and mesoporous perovskite solar cells

International Conference on Perovskite Thin Film Photovoltaics, Photonics and Optoelectronics (ABXPV18PEROPTO)

Perovskite Photonics and Optoelectronics (PEROPTO18). 1st March

Rennes, France, 2018 February 28th - March 1st
Conference Chairs: Jacky Even and Samuel D. Stranks

Conference Program

February 28th - Day 2 (Wednesday)	
16:00 - 17:15	**Registration PEROPTO**
16:15 - 17:45	**Poster session ABXPV and PEROPTO**
17:45 - 18:00	**Poster awards ceremony**
March 1st - Day 3 (Thursday)	
08:45 - 08:50	**Announcement of the day**
08:50 - 09:00	**Opening PEROPTO**
	Session H1 Chair: Samuel D. Stranks Room: Salon Merlin
09:00 - 09:30 H1-I1	Maksym Kovalenko *(ETH Zurich & EMPA)* Colloidal nanocrystals of APbX3 [A=Cs+, CH(NH2)2+, X=Cl-, Br-, I-] perovskites with bright photoluminescence spanning the entire visible spectral range
09:30 - 10:00 H1-I2	Barry Rand *(Department of Electrical Engineering, Princeton University)* Light emitting devices and lasers from metal halide perovskites
10:00 - 10:30 H1-I3	Laura Herz *(Clarendon Laboratory, Department of Physics, University of Oxford, Parks Road, Oxford, OX1 3PU, United Kingdom)* Fundamental mechanisms determining charge-carrier recombination and mobility in hybrid perovskites at the intrinsic limit
10:30 - 11:00	**Coffee Break**
11:00 - 11:30 H1-I4	Iván Mora-Seró *(Institute of Advanced Materials, Universitat Jaume I, Spain)* Perovskite Optical Amplifying Waveguides
11:30 - 12:00 H1-I5	Tze Chien Sum *(Nanayang Technological University, Singapore)* Towards Hot Carrier Perovskite Solar Cells
12:00 - 12:30 H1-I6	Paul Meredith *(Swansea University,)*, Qianqian Lin, Paul Burn, Ardalan Armin Organohalide Perovskite Photodetectors
12:30 - 12:45	_____
	Session C1 Chair: Barry Rand Room: Salon Morgane
14:00 - 14:15 C1-O1	Géraud Delport *(Laboratoire Aimé Cotton, CNRS, Univ. Paris-Sud, ENS Paris-Saclay, Université Paris-Saclay,91405 Orsay Cedex, FR)*, Ferdinand Lédée, Hiba Diab, Gaëlle Trippé-Allard, Damien Garrot, Jean-Sébastien Lauret, Emmanuelle Deleporte Micro-photoluminescence study of 2D-layered perovskites crystals and thin films. Correlation between the structural and optoelectronics properties.

14:15 - 14:30 C1-O2	Noelia Devesa Canicoba *(Materials Physics and Applications Division, Los Alamos National Laboratory, Los Alamos NM, 87545, USA)*, Kasun Fernando, Jean-Christophe Blancon, Fangze Liu, Laurent Le Brizoual, Regis Rogel, Jacky Even, Bruce W. Alphenaar, Wanyi Nie, Aditya D. Mohite High-performance, hysteresis free, ambipolar hybrid perovskite based field-effect transistors
14:30 - 14:45 C1-O3	Pierfrancesco Aversa *(LSI, UMR 7642 /CEA - CNRS - Ecole Polytechnique)*, Heejae Lee, Minjin Kim, Olivier Plantevin, Olivier Cavani, Nadége Ollier, Bernard Geffroy, Catherine Corbel Effect of Defect Production on Photoluminescence Properties in He ion Implanted Methylammonium Lead Tri-Iodide Perovskite Layers
14:45 - 15:00 C1-O4	Hiba Diab, Christophe Arnold, Ferdinand Lédée, Gaëlle Trippé-Allard, Géraud Delport, Christèle Vilar, Fabien Bretenaker, Julien Barjon, Jean-Sébastien Lauret, Emmanuelle Deleporte, Damien Garrot *(Groupe d'Etude de la Matière Condensée (GEMAC))* Impact of Reabsorption on the Emission Spectra and Recombination Dynamics of Hybrid Perovskite Single Crystals
15:00 - 15:15 C1-O5	María Gélvez-Rueda *(Chemical Engineering, Optoelectronic Materials, Delft University of Technology, Van der Maasweg 9, 2629 HZ Delft, The Netherlands)*, Eline Hutter, Duyen Cao, Nicolas Renaud, Constantinos Stoumpos, Joseph Hupp, Tom Savenije, Mercouri Kanatzidis, Ferdinand Grozema Effect of the organic cation on 2D organic-inorganic Perovskites
15:15 - 15:30 C1-O6	Ivy M. Asuo *(Département de Génie Électrique, École de Technologie Supérieure, 1100 rue Notre-Dame Ouest, Montréal, QC, Canada)*, Dawit Gedamu, Ibrahima Ka, Luis Felipe Gerlein, Alain Pignolet, Sylvain G. Cloutier, Riad Nechache High performance and stable pseudohalide perovskite nanowires photodetector
15:30 - 15:45 C1-O7	Laurent Pedesseau *(Fonctions Optiques pour les Technologies de l'information (FOTON), UMR 6082 INSA de Rennes - CNRS, France)*, Daniel Sapori, Boubacar Traore, Roberto Robles, Hong Hua Fang, Maria A Loi, Hsinhan Tsai, Wanyi Nie, Jean Christophe Blancon, Amanda Neukirch, Sergei Tretiak, Aditya Mohite, Claudine Katan, Jacky Even, Mikael Kepenekian Layered/3D Halide Hybrid Perovskite Semiconductors: Advances and Promises
15:45 - 16:00 C1-O8	Zahra Andaji Garmaroudi *(University of Cambridge UK)*, Mojtaba Abdi Jalebi, Sam Stranks Efficient Energy Transfer in Mixed Halide Perovskite Semiconductors
	Session D1 Chair: Maksym Kovalenko Room: Salon Merlin
14:00 - 14:15 D1-O1	Adam Wright *(Clarendon Laboratory, Department of Physics, University of Oxford, Parks Road, Oxford, OX1 3PU, United Kingdom)*, Rebecca Milot, Giles Eperon, Henry Snaith, Michael Johnston, Laura Herz Band Tail States in FAPbI3: Characterization and Simulation
14:15 - 14:30 D1-O2	Xiaoyang Che *(Institut des Sciences Chimiques de Rennes (ISCR), UMR 6226, CNRS, Université de Rennes 1, Ecole Nationale Supérieure de Chimie de Rennes INSA Rennes, France)*, Hong-Hua Fang, Maria Antonietta Loi, Claudine Katan, Mikael Kepenekian, Jacky Even First principles study of surface defects and luminescence recovery of CH3NH3PbBr3 by H2O and O2 gas
14:30 - 14:45 D1-O3	Ivan Infante *(Department of Chemistry and Pharmaceutical Sciences, Division of Theoretical Chemistry, Vrije Universiteit Amsterdam, De Boelelaan 1081, 1081 HV Amsterdam, The Netherlands)*, Simon Boehme Computational Chemistry to Design Colloidally Stable and Trap-free Perovskite Nanocrystals
14:45 - 15:00 D1-O4	Laurent Legrand *(Sorbonne Universités, UPMC Université Paris 06, CNRS-UMR 7588, Institut des NanoSciences de Paris, 4 place Jussieu, 75005 Paris, France)*, Julien Ramade, Léon Marcel Andriambariarijaona, Violette Steinmetz, Thierry Barisien, Frédérick Bernardot, Christophe Testelin, Emmanuel Lhuillier, Quentin Glorieux, Alberto Bramati, Maria Chamarro Fine Structure of Excitons and their Interactions with Phonons in Polymorphic CsPbBr3 Single Nanocrystals
15:00 - 15:15 D1-O5	Shuxia Tao *(Department of Applied Physics, Eindhoven University of Technology (TU/e), the Netherlands)*, Xi Cao, Peter Bobbert Accurate and efficient band gap predictions of metal halide perovskites using the DFT-1/2 method: GW accuracy with DFT expense

15:15 - 15:30 D1-O6	Mikaël Kepenekian *(Institut des Sciences Chimiques de Rennes (ISCR), UMR 6226, CNRS, Université de Rennes 1, Ecole Nationale Supérieure de Chimie de Rennes INSA Rennes, France)*, Boubacar Traore, Jean-Christophe Blancon, Hsinhan Tsai, Wanyi Nie, Constantinos Stoumpos, Laurent Pedesseau, Claudine Katan, Sergei Tretiak, Mercouri Kanatzidis, Jacky Even, Aditya Mohite Making and breaking of the exciton in layered halide hybrid perovskites
15:30 - 15:45 D1-O7	Alyssa Kostadinov - Mutzafi *(Technion – Israel Institute of Technology)*, Maya Isarov, Liang Zheng Tan, Andrew Rappe, Efrat Lifshitz Rashba effect as a source for a long carrier diffusion length in nanostructures assembly and bulk halide perovskites
15:45 - 16:00 D1-O8	Antoine Lacoix, Guy Trambly de Laissardière, Jean-Pierre Julien, Didier Mayou *(Institut Néel, CNRS and Université Grenoble-Alpes /Grenoble)* Modelisation of disorder and localisation effect for electrons and holes in MAPI

Poster Contribution

078	Simon Boehme *(VU University Amsterdam)* How can we dispose of heat in semiconductor nanocrystals?
095	Hilal Balout, Marcelo Andres Carignano, Laurent Le Pollès, Claire Roiland, Eric Furet *(Institut des Sciences Chimiques de Rennes (ISCR), UMR 6226, CNRS, Université de Rennes 1, Ecole Nationale Supérieure de Chimie de Rennes INSA Rennes, France)*, Jacky Even, Claudine Katan CH3NH3+ Dynamics in CH3NH3PbBr3 by Combining Solid-State NMR and Molecular Dynamics Calculations
101	azin babaei *(Instituto de Ciencia Molecular, Universidad de Valencia, C/ Catedrático J. Beltrán 2, 46980 Paterna, Spain)*, Maria-Grazia La-Placa, Yousra El-Ajjouri, Laura Martínez-Sarti, Pablo p.boix, Michele Sessolo, Henk J. Bolink *(Instituto de Ciencia Molecular, Universidad de Valencia, C/ Catedrático J. Beltrán 2, 46980 Paterna, Spain)* Vacuum-Processed Methylammonium Lead Halide Light-Emitting Diodes
102	Kazuya Yamamoto *(Faculty of Science and Technology, Sophia University, Japan)*, Noriyuki Takada, Masanao Era, Hideyuki Kunugita, Kazuhiro Ema Optical properties of cavity polaritons in microcavities containing organic-inorganic two-dimensional perovskite materials
104	Matthew Schulz *(Faculty of Science and Technology, Sophia University, Japan)*, Yosuke Udagawa, Yuiga Nakamura, Kohei Kimura, Chinami Yura, Kazuya Yamamoto, Tomonori Matsushita, Takashi Kondo, Hideyuki Kunugita, Kazuhiro Ema Exciton Structure of Perovskite Single Crystals (CH3NH3PbBr3 and CH3NH3PbI3)
117	Piotr Krupinski *(Institute of Physical Chemistry, Polish Academy of Sciences, Warszawa, Poland.)*, Anna M. Cieslak, Daniel Prochowicz, Janusz Lewinski Challenges in design and synthesis of zinc oxide nanocrystalline materials for applications in planar and mesoporous perovskite solar cells