

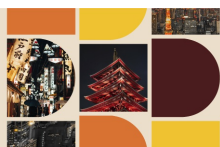
## Asia-Pacific International Conference on Perovskite, Organic Photovoltaics and Optoelectronics (IPEROP24)

**Tokyo, Japan, 2024 January 22nd - 23rd**

**Conference organizers: Shuzi Hayase, Qing Shen and James Ryan**

### Conference Program

January 22nd - Day 1 (Monday) 1	
08:00 - 09:00	<b>Registration</b>
08:50 - 09:00	<b>Opening</b>
<b>Session 1A</b>	
09:00 - 09:45	<u>Yoshihiko Kanemitsu</u> ( <i>Institute for Chemical Research, Kyoto University</i> ) Photophysics of lead halide perovskite semiconductors
09:45 - 10:15	<u>Emilio Palomares</u> ( <i>ICREA (Institutió Catalana de Recerca i Estudis Avançats), 08010 Barcelona, Spain</i> ) The Chemistry of SAMs : Selective contacts for Perovskite Based Solar Cells.
10:15 - 10:45	<u>Annamaria Petrozza</u> ( <i>Istituto Italiano di Tecnologia</i> ) Defects Activity in Metal Halide Perovskites
10:45 - 11:15	<b>Coffee Break</b>
<b>Session 2A</b>	
11:15 - 11:45	<u>Chu-Chen Chueh</u> ( <i>Department of Chemical Engineering, National Taiwan University, Taipei 10617, Taiwan</i> ) Two-Dimensional Sn-Based Perovskite Transistors and their Memory and Synaptic behavior
11:45 - 12:15	<u>Seigo Ito</u> ( <i>University of Hyogo</i> ) Function of Porous Carbon in Multi-Porous-Layered-Electrode Perovskite Solar Cells
12:15 - 12:20	<u>Luca Sorbello</u> ( <i>Greatcell Solar</i> ) Greatcell Solar - Industry talk
12:20 - 12:50	<u>Anita Ho-Baillie</u> ( <i>The University of Sydney Nano Institute (Sydney Nano) and School of Physics, University of Sydney, Sydney 2006, Australia</i> ) Design principles for perovskite solar cells for tandem and space applications
12:50 - 13:20	Yi He, Qianji Han, <u>Tingli Ma</u> ( <i>Kyushu Institute of Technology, Japan</i> ) Development of nanomaterials for Perovskite Solar Cells
13:20 - 15:00	<b>Lunch Break</b>
<b>Session 1C1</b>	
15:00 - 15:30	Haoxin Mai, Xuying Li, Tu Le, Dehong Chen, <u>Rachel Caruso</u> ( <i>RMIT University, Melbourne, Australia</i> ) Designing perovskites with structural and compositional variation to maximise optoelectronic properties
15:30 - 15:45	<u>Dhruba KHADKA</u> ( <i>Photovoltaic Materials Group, Center for GREEN Research on Energy and Environmental Materials, National Institute for Materials Science (NIMS), 1-1 Namiki, Tsukuba, Ibaraki 305-0044, Japan</i> ), Yasuhiro SHIRAI, Masatoshi YANAGIDA, Hitoshi Ota, KENJIRO MIYANO Effect of Bifunctional Molecular Passivator for Modulating Efficiency and Stability of Inverted Perovskite Solar Cells
15:45 - 16:00	<u>Jiliani Nei de Freitas</u> ( <i>Centro de Tecnologia da Informação Renato Archer - CTI - Campinas-SP, Brazil</i> ), Andreia de Moraes, José Maria Clemente Silva Filho, Francisco das Chagas Marques Stability of Metal Contacts in Perovskite Solar Cells
16:00 - 16:15	<u>Suer Zhou</u> ( <i>Department of Physics, University of Oxford, Clarendon Laboratory, Parks Road, OX1 3PU, United Kingdom</i> ), Junxiang Zhang, Yangwei Shi, Joel Smith, James Drysdale, Benjamin Gallant, Margherita Taddei, Harry Sansom, Declan McCarthy, Stephen Barlow, Akash Dasgupta, Ashley Marshall, Jian Wang, David Ginger, Seth Marder, Henry Snaith Benzylamine Passivation of Wide-Bandgap Perovskite
16:15 - 16:30	<u>Ming-Hsuan Yu</u> ( <i>Department of Chemical Engineering, National Taiwan University, Taipei 10617, Taiwan</i> ), Chiung-Han Chen, Chu-Chen Chueh Unveiling the Role of Self-Assembled Monolayer Structural Design in Optimizing Hole-Selective Contacts for Efficient Inverted Perovskite Solar Cells
16:30 - 16:45	<u>Naoyuki Nishimura</u> ( <i>National Institute of Advanced Industrial Science and Technology (AIST)</i> ), Hiroaki Tachibana, Ryuzi Katoh, Hiroyuki Kanda, Takuro Murakami Aliphatic Primary Ammonium Bis(trifluoromethylsulfonyl)imide as a Highly Functional Additive for Spiro-OMeTAD Hole Transport Material in Perovskite Solar Cells
<b>Session 1C2</b>	
15:00 - 15:30	<u>Antonio Guerrero</u> ( <i>Institute of Advanced Materials (INAM), Universitat Jaume I, 12006 Castelló, Spain.</i> ) Interplay between ion migration and Contacts in Halide Perovskite Electronic Devices
15:30 - 15:45	<u>Molly Worth</u> ( <i>Swansea University</i> ), David Beynon, Dima Sirbu, Trystan Watson Simultaneous Surface Enhancement of n and p Type Transport Layers for Back Contacted Perovskite Modules
15:45 - 16:00	<u>Zhong-En Shi</u> ( <i>Department of Materials Engineering, Ming Chi University of Technology, New Taipei City, Taiwan</i> ), Chih-Ping Chen MA-free Wide-Bandgap Perovskite for Indoor Photovoltaic Applications
16:00 - 16:15	<u>Lara PERRIN</u> ( <i>Univ. Grenoble Alpes, Univ. Savoie Mont Blanc, CNRS, Grenoble INP, LEPMI, 38000 Grenoble, France</i> ), Emilie PLANES, Ryuki TSUJI, Stéphanie NARBEY, Cynthia FARHA, Jean-Claude HONORE, David MARTINEAU, Seigo ITO, Lionel FLANDIN Carbon-based mesoscopic perovskite solar cells: new insights for promising efficiency and durability enhancements.
16:15 - 16:30	<u>Masahide Kawaraya</u> ( <i>Kanagawa Institute of Industrial Science and Technology (KISTEC)</i> ), Tomoyuki Tobe, Daisuke Aoki, Hidenori Saito, Shinich Magaino International Efforts for Measurement of Performance of Perovskite Solar Cells
16:30 - 16:45	



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16:30 - 16:45 1C2-05	<u>Rahul Patidar</u> ( <i>SPECIFIC, Faculty of Science and Engineering, Swansea University, SA18EN, UK</i> ), David Beynon, Ershad Parvazian, James McGettrick, Rodrigo Garcia-Rodriguez, Chris Griffiths, Matthew Davies, Trystan Watson Advancements in Continuous Roll to Roll Manufacturing of Perovskite Solar Cells via Slot Die Coating
<b>Session 1C3</b>	
15:00 - 15:30 1C3-IS1	<u>Luis Lanzetta</u> ( <i>King Abdullah University of Science and Technology (KAUST), KAUST Solar Center (KSC), Thuwal 23955, Saudi Arabia</i> ), Asayil Alsulami, Luis Huerta Hernandez, Derya Baran Degradation, Stabilisation and Electrical Tuning of Sn and Sn-Pb Perovskite Solar Cells
15:30 - 15:45 1C3-01	<u>Kaat Valkeneers</u> ( <i>U Hasselt - Hasselt University, Institute for Materials Research (IMO-IMOMEC), Agoralaan 1, 3590 Diepenbeek, Belgium and IMOMEC Division, IMEC, Wetenschapspark 1, 3590 Diepenbeek, Belgium</i> ), Quan Liu, Bernhard Siegmund, Koen Vandewal, Wouter Maes Narrowing the gap: Optimizing donor materials for truly transparent photovoltaics
15:45 - 16:00 1C3-02	<u>Dang-Thuan Nguyen</u> ( <i>School of Engineering, The Australian National University, Canberra 2601, Australia</i> ), Thomas White, The Duong A Study on Perovskite Solar Cells' Tolerance under Proton Radiations
16:00 - 16:15 1C3-03	<u>Zhaoheng Ling</u> ( <i>King Abdullah University of Science and Technology (KAUST), KAUST Solar Center (KSC), Thuwal 23955, Saudi Arabia</i> ) Over 19% Efficiency in Ternary Organic Solar Cells Enabled by n-Type Dopants
16:15 - 16:30 1C3-04	<u>Ta-Hung Cheng</u> ( <i>Department of Materials Science and Engineering, National Taiwan University of Science and Technology, Taipei 106335, Taiwan</i> ), Yu-Sheng Hsiao, Yuan-Jay Chang, Chih-Ping Chen Comprehensive Research of Carbazole-Phosphonic Acid Derivatives as Hole-Selective Layer in Inverted Perovskite Solar Cell
16:30 - 16:45 1C3-05	<u>Xiaopeng Zheng</u> ( <i>University of Chinese Academy of Sciences, Beijing</i> ), Joseph Luther Co-deposition of hole-selective contact and absorber for improving the processability of perovskite solar cells
17:00 - 18:30	<b>Poster session</b>
19:30 - 21:30	<b>Social Dinner</b>



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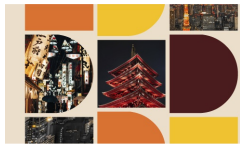
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## January 23rd - Day 2 (Tuesday) 2

08:55 - 09:00	<b>Announcement of the day</b>
	<b>Session 1B</b>
09:00 - 09:45 1B-K1	<u>JAMES DURRANT</u> ( <i>Department of Chemistry and Centre for Processable Electronics, Imperial College London, London, W12 0BZ, UK</i> ) Exciton and charge dynamics in evaporated organic solar cells and photodetectors
09:45 - 10:15 1B-I1	<u>Hideo Ohkita</u> ( <i>Department of Polymer Chemistry, Kyoto University</i> ), Hyung Do Kim Ternary Blends Improve Light Harvesting and Charge Transport in Polymer Solar Cells
10:15 - 10:45 1B-I2	<u>Yasuhiro Tachibana</u> ( <i>RMIT University</i> ), Wakana Matsuda Correlation of charge carrier dynamics with the performance of metal halide perovskite solar cells
10:45 - 11:15	<b>Coffee Break</b>
	<b>Session 2B</b>
11:15 - 11:45 2B-I1	<u>Itaru Osaka</u> ( <i>Graduate School of Advanced Science and Engineering, Hiroshima University</i> ) Design and Synthesis of $\pi$ -Conjugated Polymers for Efficient Organic Photovoltaics
11:45 - 12:15 2B-I2	<u>Ji-Seon Kim</u> ( <i>Department of Physics &amp; Centre for Processable Electronics, Imperial College London, UK</i> ) Key Molecular Perspectives for High-Performance Non-Fullerene Acceptor Organic Photovoltaics and Photodetectors
12:15 - 12:20 2B-S1	<u>Taro Tanabe</u> ( <i>Tokyo Chemical Industry</i> ) Tokyo Chemical Industry - Industry Talk
12:20 - 12:50 2B-I3	<u>Ana Flavia Nogueira</u> ( <i>Laboratory of Nanotechnology and Solar Energy, Institute of Chemistry, University of Campinas – UNICAMP</i> ) In situ experiments using Synchrotron radiation: an experience with halide perovskites
12:50 - 13:20 2B-I4	<u>Udo Bach</u> ( <i>ARC Centre of Excellence in Exciton Science, Department of Chemical and Biological Engineering, Monash University, Clayton, VIC, Australia</i> ), Adam Surmiak Experimental High-Throughput Energy Materials Discovery
13:20 - 15:00	<b>Lunch Break</b>
	<b>Session 2C1</b>
15:00 - 15:30 2C1-IS1	<u>José Manuel Marín Beloqui</u> ( <i>Department of Physical Chemistry, University of Malaga, Blvd Louis Pasteur 31, 29010, Malaga, Spain</i> ) Use of Transient Absorption Spectroscopy to Probe Unexpected Phenomena in Organic Electronics
15:30 - 15:45 2C1-O1	<u>Giacomo Giorgi</u> ( <i>Department of Civil &amp; Environmental Engineering (DICA), Via G. Duranti 93, I-06125 Perugia, The University of Perugia, Italy</i> ), Maurizia Palummo, Koichi Yamashita Optoelectronic Features of 3D, mixed 2D/3D, 2D Hybrid and Full Inorganic Pb-less and Pb-free Perovskites: A Theoretical Standpoint
15:45 - 16:00 2C1-O2	<u>Chiara Frasca</u> ( <i>Helmholtz-Zentrum Berlin für Materialien und Energie GmbH, Berlin</i> ) A Doping Approach for Reducing the Off-Centring Effect of the Sn-Cation in the Lead-Free Perovskite Crystal Structure
16:00 - 16:15 2C1-O3	<u>Amanz Azaden</u> ( <i>Department of Materials, Imperial College London, Exhibition Road, SW7 2AZ London, United Kingdom</i> ), Robert Palgrave, Saif Haque Improving the Performance and Stability of Sn Perovskite Solar Cells by Compositional Engineering
16:15 - 16:30 2C1-O4	<u>Jesus Alberto Sanchez Diaz</u> ( <i>Institute of Advanced Materials (INAM), Universitat Jaume I. Av. de Vicent Sos Baynat, s/n 12006, Castelló de la Plana, Spain</i> ), Felipe A. Vinocour Pacheco, Wiktor Zuraw, Senol Oz, Ivan Mora Sero Upscalable and flexible Tin-Based Perovskites solar cells by Bladecoating technic
	<b>Session 2C2</b>
15:00 - 15:30 2C2-IS1	<u>Jovana V. Milić</u> ( <i>Adolphe Merkle Institute, University of Fribourg, CH-1700 Fribourg, Switzerland</i> ) Multifunctional Layered Hybrid Perovskites in Photovoltaics
15:30 - 15:45 2C2-O1	<u>Chieh-Szu Huang</u> ( <i>University of Cambridge, Dept. of Chemical Engineering and Biotechnology</i> ) Amphiphilic polymer conetworks for organic solar cells
15:45 - 16:00 2C2-O2	<u>Yu-Cheng Tseng</u> ( <i>National Taiwan University, Taiwan</i> ), Aoto Kato, Francis (Ray) Lin, Tomoya Higashihara, Chu-Chen Chueh Using Donor-acceptor Conjugated Block Copolymers as Single-component Photoactive Materials or as Compatibilizers for High-performance Organic Photovoltaics
16:00 - 16:15 2C2-O3	<u>Chang Jia-Fu</u> ( <i>Department of Chemical Engineering, National Taiwan University, Taipei 10617, Taiwan</i> ), Chueh Chu-Chen Enhancing Power-to-Conversion Efficiency in All-Polymer Solar Cells through Morphology Control and Mixed Solvent Strategies
16:15 - 16:30 2C2-O4	<u>Hua Tang</u> ( <i>King Abdullah University of Science and Technology (KAUST), KAUST Solar Center (KSC), Thuwal 23955, Saudi Arabia</i> ) Strategies to Enhance the Commercial Viability of Organic Solar Cells
	<b>Session 2C3</b>
15:00 - 15:30 2C3-IS1	<u>Teresa Ripolles</u> ( <i>Instituto de Ciencia de Materiales, Universidad de Valencia (ICMUV), 46071 Valencia, Spain.</i> ) Novel additives for controlling the stability of Sn-based perovskite for photovoltaic applications.
15:30 - 15:45 2C3-O1	<u>Dev Bahadur Khadka</u> ( <i>Nagoya Institute of Technology</i> ), Shinya Kato, Tetsuo Soga A High Open Circuit Voltage Bismuth Sulfide-Based Solar Cell with Nanowire Structure via Spin Coating
15:45 - 16:00 2C3-O2	<u>Chiung-Han Chen</u> ( <i>Department of Chemical Engineering, National Taiwan University, Taipei 10617, Taiwan</i> ), Chu-Chen Chueh Enhancing the Performance of Two-Dimensional Tin-Based Pure Red Perovskite Light-Emitting Diodes through the Synergistic Effect of Natural Antioxidants and Cyclic Molecular Additives
16:00 - 16:15 2C3-O3	<u>Kasparas Rakstys</u> ( <i>Department of Organic Chemistry, Kaunas University of Technology, Radvilenu pl. 19, Kaunas 50254, Lithuania</i> ) Molecular approaches towards highly efficient and stable perovskite solar cells
16:15 - 16:30 2C3-O4	<u>Anton Malko</u> ( <i>The University of Texas at Dallas</i> ) Ultra-low threshold lasing and light emitting diodes using mixed perovskite systems.
16:30 - 17:00	<b>Break</b>
	<b>Session 2D</b>
17:00 - 17:30 2D-I1	<u>Atsushi Wakamiya</u> ( <i>Institute for Chemical Research, Kyoto University</i> ) Interface Structure Design for Efficient Perovskite Solar Cells



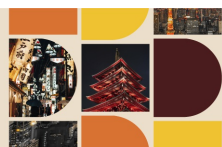
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17:30 - 18:15 2D-K1	<a href="#"><u>Hiroshi Segawa</u></a> ( <i>University of Tokyo, Japan, JP</i> ) Abstract of Hiroshi Segawa
18:15 - 18:30	<b>Closing</b>



## Poster Contribution

006	<u>Li Xiaofen</u> (School of materials science and engineering, Tsinghua University), Li shunning, Liu jianbo, Liu baixin High-throughput Screening of Ferroelectric Materials for Perovskite Solar Cells: A Combined First-principles Calculation and Experimental Study
049	<u>Said Kazaoui</u> (National Institute of Advanced Industrial Science and Technology (AIST)) MASnI <sub>3</sub> Perovskite Films Synthesized Using Sn Metallic Thin Films in Presence of MAI Vapor
059	<u>Kun-Mu Lee</u> (Chang Gung University) Augmenting the performance and stability of perovskite solar cells by introducing cesium iodide doping into the PbI <sub>2</sub> film via a two-step deposition method
060	<u>Rashi Kedia</u> (CSIR-National Physical Laboratory, Dr. K. S. Krishnan Marg, Delhi 110012), Asit Patra Solvent-Free Deposition of Copper(I) Thiocyanate Film: An Alternative Approach for the Hole Transport Layer in Perovskite Solar Cells
062	<u>Xiaoming Chang</u> (King Abdullah University of Science and Technology (KAUST)), Thomas Anthopoulos Molecule doping enabled high-performance inverted perovskite solar cells
063	<u>Sam Teale</u> (Department of Physics, University of Oxford, Clarendon Laboratory, Parks Road, OX1 3PU, United Kingdom), Henry Snaith Examining the influence of temperature coefficients of perovskite tandem photovoltaics under real-world conditions
064	<u>Rohith Kumar Raman</u> (SRM Institute of Science and Technology), Ananthanarayanan Krishnamoorthy Development, Stability Aspects of Encapsulants based on Thermoplastic Polyurethanes for Perovskite Solar Cells
065	<u>Jakapan Chantana</u> (EneCoat Technologies Co.,Ltd.), Shuhei Yamamoto, Tamotsu Horiuchi, Minh Anh Truong, Atsushi Wakamiya NiOx nanoparticle/triazatruxene-based hole collecting monolayer in the inverted perovskite solar cell for its improved stability
066	<u>Nobuko Onozawa-Komatsuzaki</u> (National Institute of Advanced Industrial Science and Technology (AIST)), Daisuke Tsuchiya, Shinichi Inoue, Atsushi Kogo, Takuro N. Murakami Green-Solvent-Processable, Dopant-Free Hole-Transporting Material for Efficient and Stable Perovskite Solar Cells
067	<u>Makito Takagi</u> (Yokohama City University), Takumi Naito, Masanori Tachikawa, Koichi Yamashita, Tomomi Shimazaki Theoretical study of the molecular passivation effect of Lewis base/acid on Sn perovskite surface defects
068	<u>Aditya Wahyu Anugrah</u> (Nara Institute of Science and Technology), Itaru Raifuku, Hidenori Kawanishi, Yukiharu Uraoka Narrow Band gap Bismuth Tri-iodide via Cesium Tin Iodide Doping for Lead-free Solar Cells Application
069	<u>Mantas Marcinkas</u> (Department of Organic Chemistry, Kaunas University of Technology, Kaunas LT-50254, Lithuania.), Tadas Malinauskas, Vytautas Getautis Carbazole-Based Halogenated SAMs as High Performing Hole Transporting Materials for Organic Photovoltaics
070	<u>Lauryna Monika Svirskaite</u> (Department of Organic Chemistry, Kaunas University of Technology, Kaunas LT-50254, Lithuania.), Tadas Malinauskas, Vytautas Getautis Non-Fullerene Semiconductors for Applications in Emerging Photovoltaics
071	<u>Liang Wang</u> (The University of Electro-Communications), Qing Shen, Shuzi Hayase Management of Carrier Transportation for Highly Efficient Tin-based Perovskite Solar Cells
072	<u>Huan Bi</u> (Info-Powered Energy System Research Center (i-PERC), The University of Electro-Communications, Japan), Saulius Grigalevicius, Hiroshi Segawa, Qing Shen, Shuzi Hayase New hole transport layer prepares high-efficiency all-perovskite tandem solar cells
073	<u>Masatoshi Yanagida</u> (Photovoltaic Materials Group, Center for GREEN Research on Energy and Environmental Materials, National Institute for Materials Science (NIMS), 1-1 Namiki, Tsukuba, Ibaraki 305-0044, Japan), Dhruva B. Khadka, Yasuhiro Shirai, Kenjiro Miyano MODIFICATION OF PEROVSKITE LAYER by IONIC ADDITIVES for the PEROVSKITE SOLAR CELLS
074	<u>Jiaqi Liu</u> (i-Powered Energy System Research Center (i-PERC), The University of Electro-Communications), Liang Wang, Qing Shen, Shuzi Hayase Removing the Interface Impurity for Enhanced Efficiency of Tin Perovskite
075	<u>Siliang Cao</u> (Photovoltaic Materials Group, Center for GREEN Research on Energy and Environmental Materials, National Institute for Materials Science (NIMS), 1-1 Namiki, Tsukuba, Ibaraki 305-0044, Japan), Yulu He, Md Emrul Kayesh, Takeaki Sakurai, Ashrafur Islam Bilateral Strategy on Inverted CsPbI <sub>2</sub> Br <sub>2</sub> Perovskite Solar Cells via Hole Selective Monolayer and Interlayer Modification
076	<u>Shamim Ahmed</u> (Photovoltaic Materials Group, Center for Green Research on Energy and Environmental Materials, National Institute for Materials Science (NIMS), 1-2-1 Sengen, Tsukuba 305-0047, Ibaraki, Japan), He Yulu, Kiyoto Matsushita, Md. Emrul Kayesh, Ashrafur Islam Rare earth cation doped SnO <sub>2</sub> ETL for the reduction of energy level mismatch of the highly efficient perovskite solar cells
077	<u>Hsing-Jung Hsieh</u> (National Chung Hsing University, Department of Chemical Engineering, Taiwan), Huan-Wei Lin, Tian-Ya Zeng, Chieh-Ting Lin Enhancing the Performance of Sn-Pb Perovskite Solar Cells using DBU-Dedoped PEDOT:PSS
078	<u>Min Sun</u> (National Chung Hsing University, Department of Chemical engineering, Taiwan), Chieh-Ting Lin Enhancing Lettuce Growth and Quality Through Integration of Semi-Translucent Organic Photovoltaic Panels in Greenhouse.
079	<u>Ting Ko Hsu</u> (National Chung Hsing University, Department of Chemical engineering, Taiwan), Chieh Ting Lin Enhancing Coverage Area of Perovskite Single-Crystal Solar Cells with Polypropylene Assisted Growth and Oxygen-Argon Plasma Treatment
080	<u>Ajay Kumar Baranwal</u> (i-Powered Energy System Research Center (i-PERC), The University of Electro-Communications), Huan Bi, Gaurav Kapil, Qing Shen, Shuzi Hayase Tin Halide Perovskite-PCBM Heterojunction Solar Cells
081	Yu-Ting Yang, <u>Yen-Han Shih</u> (Department of Chemical Engineering, National Taiwan University, Taipei 10617, Taiwan), Qun-Gao Chen, Wen-Ya Lee, Chu-Chen Chueh Realization of Perovskite Transistor Memory and Dual-modulated Synapses through a Heterojunction Design
082	<u>Naoto Eguchi</u> (Natinonal Institute of Advanced Industrial Science and Technology), Taro Fukazawa, Hiroyuki Kanda, Takashi Miyake, Takuro Murakami Development of High-Efficiency Perovskite Solar Cells Using Automated Coating Systems and Bayesian Optimization
083	<u>Thanh-Danh Nguyen</u> (Laboratory of Nano Energy Harvesting Materials and Devices, Department of Nano Fusion Technology, Pusan National University, Pusan, Korea), Sun-Ju Kim, Ji-Youn Seo Additive-mediated formation of large perovskite grains for efficient organometallic solar cells
084	<u>Tomoyuki TOBE</u> (Kanagawa Institute of Industrial Science and Technology (KISTEC), KSP EAST 1F, 3-2-1 Sakado, Takatsu-ku, Kawasaki-shi, Kanagawa 213-0012, Japan), Daisuke AOKI, Hidenori SAITO, Masahide KAWARAYA, Shinichi MAGAINO Second Worldwide Roud Robin Test of Maximum Power Measurement for a Perovskite Solar Cell



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085	Ji-Youn Seo, <u>Sun-Ju Kim</u> ( <i>Pusan National University</i> ), Danh Nguyen Interfacial Engineering through Lead Binding using Crown Ethers in Perovskite Solar Cells
087	<u>Jun Ryu</u> ( <i>Department of Smart Cities, Chung-Ang University, 84 Heukseok-ro, Dongjak-gu, Seoul 06974, Republic of Korea</i> ), Saemon Yoon, SungWon Cho, Dong-Won Kang Semi-Transparent Perovskite Solar Cells with Wide Bandgap for Sustainable Urban Planning and Transportation
088	<u>Dong-Hwan Hwang</u> ( <i>Laboratory of Nano Energy Harvesting Materials and Devices, Department of Nano Engineering, Pusan National University, Pusan, Korea</i> ), Gyeong-Ho Jeong, Ji-Youn Seo Boosting performance of perovskite solar module with novel interconnection line P0
089	<u>Gyeong-Ho Jeong</u> ( <i>Laboratory of Nano Energy Harvesting Materials and Devices, Department of Nano Energy Engineering, Pusan National University, Korea</i> ), Ji-Youn Seo Enhancing Structural Stability of Perovskite Solar Cells Using Naphthalene Diimide Derivative as a C60 Bonding Layer
090	<u>Olzhas Kurman</u> ( <i>Laboratory of Nano Energy Harvesting Materials and Devices, Department of Nano Engineering, Pusan National University, Pusan, Korea</i> ), Ji-Youn Seo Improving Efficiency by Formation of High Quality of Perovskite Film by Vacuum Deposition Process
091	<u>Shahrir Razey Sahamir</u> ( <i>i-Powered Energy System Research Center (i-PERC), The University of Electro-Communications</i> ), Gaurav Kapil, Takeru Bessho, Hiroshi Segawa, Qing Shen, Shuzi Hayase Selection of Carrier Selective Layers that leads to an Improved Performance and Stability in Tin-Lead Perovskite Solar Cells
092	<u>Gaurav Kapil</u> ( <i>i-Powered Energy System Research Center (i-PERC), The University of Electro-Communications</i> ), Yasuhiro Fujiwara, Qing Shen, Hiroshi Segawa, Shuzi Hayase MA free Sn-Pb-Gex perovskite solar cells
095	<u>Padmini Pandey</u> ( <i>Department of Energy Systems Engineering, Chung-Ang University, 84 Heukseok-ro, Dongjak-gu, Seoul 06974, Republic of Korea.</i> ), SungWon Cho, Dong-Won Kang 4-Phenylthiosemicarbazide additive approach for wide-bandgap Pb-free perovskite solar cells with a record efficiency of over 12.2%
096	<u>Ji Youn Kim</u> ( <i>Nano and Information Materials Lab. (NIMs Lab.), Department of Materials Chemistry and Engineering, Konkuk University, 1 Hwayang-dong, Gwangjin-gu, Seoul, Republic of Korea.</i> ), Eun Mi Jang, Doo Kyung Moon Distribution of Polymer Additives Enables Efficient Semi-Transparent Layer-By-Layer Architecture of Organic Solar Cells
097	<u>Jong-Min Kim</u> ( <i>Laboratory of Nano Energy Harvesting Materials and Devices, Department of Nano Engineering, Pusan National University, Pusan, Korea</i> ), Ji-Youn Seo, Sun-Ju Kim Controlled Growth of Hybrid Halide Perovskites by Crown Ether Complexation for Perovskite Solar Cells
098	<u>Koichi Yamashita</u> ( <i>Graduate School of Nanobioscience,, Yokohama City University</i> ), Azusa Muraoka, Masanori Kaneko, Giacomo Giorgi Optical Properties and Defect Structures of Double Perovskite Cs <sub>2</sub> SnGeI <sub>6</sub>
099	<u>Mai Otake</u> ( <i>Japan Women's University</i> ), Suzune Omori, Masanori Kaneko, Giacomo Giorgi, Koichi Yamashita, Azusa Muraoka First-principles calculations of defect structures in Sn perovskite solar cell materials
100	<u>Hyojung Kim</u> ( <i>The Institute of Basic Science, Kunsan National University, Gunsan, 54150, South Korea</i> ), Hye Min Oh Monitoring Carrier Dynamics at Perovskite Grain Boundaries using Micro-TAS System
101	<u>Yin-Ti Lai</u> ( <i>Department of Chemical Engineering, National Taiwan University, Taipei 10617, Taiwan</i> ), Chu-Chen Chueh High Performance Hole-Transporting-Layer Free Perovskite Light-Emitting Diodes by Incorporating Self-Assembled Molecules