



Asia-Pacific International Conference on Perovskite, Organic Photovoltaics and Optoelectronics (IPEROP26)

Nagoya, Japan, 2026 January 13th - 15th

Conference organizers: Yutaka Matsuo, Satoshi Uchida, Pablo P. Boix and Seigo Ito

Conference Program

January 13th - Day 1 (Tuesday) 1	
14:00 - 14:50	Registration
14:50 - 15:00	Opening and announcement
	Session 1A
15:00 - 15:45	<u>Hiroshi Segawa</u> (<i>Research Center for Advanced Science and Technology, The University of Tokyo, Tokyo, Japan.</i>)
1A-K1	Material Engineering toward High Performance Perovskite Solar Cells and Modules
15:45 - 16:15	<u>Marina Freitag</u> (<i>School of Natural and Environmental Science, Newcastle University, Newcastle upon Tyne, United Kingdom</i>)
1A-I1	Diffuse Light to Structured Information with Hybrid Photovoltaics
16:15 - 16:45	<u>Hyunjuong Shin</u> (<i>SKKU Institute of Energy Science and Technology (SIEST), Sungkyunkwan University (SKKU), 2066, Seobu-ro, Jangan-gu, Suwon, Gyeonggi-do 16419, Republic of Korea</i>)
1A-I2	Centrosymmetry Breaking in Cubic FAPbI_3 Films and Perovskite Solar Cells Enabled by ALD (Atomic Layer Deposition)
16:45 - 17:15	<u>Hayashi Yashuiko</u> (<i>Okayama University</i>)
1A-I3	TBA
17:15 - 18:45	Welcome Reception



January 14th - Day 2 (Wednesday) 2

08:00 - 08:50	Registration
08:50 - 09:00	Opening and announcement of the day
Session 2A	
09:00 - 09:45 2A-K1	<u>Liyuan Han</u> (<i>School of Materials Science & Engineering, Shanghai Jiao Tong University, 800 Dongchuan Rd, 200240, China</i>) Perovskite solar cells towards commercialization: Progress and Future Prospects
09:45 - 10:15 2A-I1	<u>Toshinori Matsushima</u> (<i>International Institute for Carbon-neutral Energy Research (WPI-I2CNER), Kyushu University</i>) Achieving Durable and Efficient Perovskite Solar Cells through Material and Interface Optimization
10:15 - 10:45 2A-I2	<u>Annalisa Bruno</u> (<i>Energy Research Institute @ NTU, Nanyang Technological University, Research Techno Plaza, 50 Nanyang Drive, Singapore 637553</i>) Customized Growth of Perovskites for Advanced Photovoltaics and Optoelectronic Devices
10:45 - 11:15	Coffee Break
Session 2B	
11:15 - 11:45 2B-I1	<u>Nam-Gyu Park</u> (<i>Sungkyunkwan University (SKKU)</i>) Perovskite photovoltaics: The revolution of solar energy
11:45 - 12:15 2B-I2	<u>Takuro Murakami</u> (<i>National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan</i>) Materials and Processes for the Commercialization of Durable Perovskite Solar Cells
12:15 - 12:20	Industry talk
12:20 - 12:50 2B-I3	<u>Tsutomu Miyasaka</u> (<i>Toin University of Yokohama, Peccell Technologies, Inc.</i>) Interfacial Molecular Organization for Next-generation Perovskite Solar Cells
12:50 - 13:20 2B-I4	Chu Zhang, Jiaze Sun, <u>Tingli Ma</u> (<i>China Jiliang University, Hangzhou, P. R. China</i>) Interface passivation with small molecules for improving performance of perovskite solar cells
13:20 - 15:00	Lunch Break
Session 2C1	
15:00 - 15:30 2C1-IS1	<u>Iván Mora-Seró</u> (<i>Institute of Advanced Materials (INAM), Universitat Jaume I, Castelló, 12006 Spain</i>) Sn-Based Halide Perovskites: A Lead-Free Alternative
15:30 - 15:45 2C1-O1	<u>Chieh-Ting Lin</u> (<i>Department of Chemical Engineering, National Chung Hsing University, Taichung, Taiwan</i>) How Interface and Crystal Growth Interplay to Define Voltage and Stability in Sn-Pb Perovskite Solar Cells
15:45 - 16:00 2C1-O2	<u>Bhawna Rawat</u> (<i>Advanced Functional Nanomaterials, Institute of Nano Science and Technology (INST), Knowledge City, Sector 81, SAS Nagar, Manauli PO, 140306 Mohali, Punjab, India</i>), Kamalakannan Kailasam Stable Lead-Free Halide Perovskites: Unlocking Untapped Potential
16:00 - 16:15 2C1-O3	<u>Giacomo Giorgi</u> (<i>Department of Civil & Environmental Engineering (DICA), Via G. Duranti 93, I-06125 Perugia, The University of Perugia, Italy</i>), Maurizia Palumbo, Koichi Yamashita Structural, Electronic, and Optical Properties of Pb-Free Perovskites: Dimensional Evolution from Bulk to 2D Architectures
16:15 - 16:30 2C1-O4	<u>Kai-Chun Chang</u> (<i>Department of Chemical Engineering, National Chung Hsing University, 145 Xingda Road, Taichung 402, Taiwan.</i>), Zhong-En Shi, Hsing-Jung Hsieh, Chih-Ping Chen, Chieh-Ting Lin Incorporation of DBU Dopant to Optimize PEDOT:PSS Hole Transport Layer in Sn-Pb Perovskite Photodetectors
16:30 - 16:45 2C1-O5	<u>Runmin Tao</u> (<i>School of Physics, The University of Sydney, Sydney, NSW 2006, Australia</i>), Guoliang Wang, Zhihao Li, Nan Sun, Jueming Bing, Tik Lun Leung, Fraser J. Angus, Jianbo Tang, Chwenhaw Liao, Jianpeng Yi, Christopher Bailey, Li Liu, Yu Wang, Gaosheng Huang, Andreas Lambertz, Songyan Yin, Bin Gong, Alex-Anthony Cavallaro, Drew Evans, Matthew Griffith, Kourosh Kalantar-Zadeh, Jianghui Zheng, Pablo Docampo, David R. McKenzie, Md Arafat Mahmud, Kaining Ding, Anita W.Y. Hobailie pH Modulation for Self-Assembly-Monolayer Type Hole Transport Layer for Efficient and Stable Perovskite-Silicon Double-Junction Solar Cells
Session 2C2	
15:00 - 15:30 2C2-IS1	<u>Juan Bisquert</u> (<i>Instituto de Tecnología Química, Universitat Politècnica de València-Consejo Superior de Investigaciones Científicas, Av. de los Naranjos s/n, 46022 Valencia, Spain.</i>) Insights into Hysteresis, Time Constants, and Degradation Mechanisms in Perovskite Solar Cells from Impedance and Transient Analyses
15:30 - 15:45 2C2-O1	<u>David Hardy</u> (<i>Linköping University, Sweden</i>), Feng Wang, Niansheng Xu, Feng Gao A Mechanistic Study of Trityl Salt p-Doping for PTAA Based Hole Transport Layers in Perovskite Solar Cells
15:45 - 16:00 2C2-O2	<u>Naoyuki Nishimura</u> (<i>National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan</i>), Hiroyuki Kanda, Ryuzi Katoh, Atsushi Kogo, Takuro N. Murakami Spontaneous Perovskite Passivators Tailored for PTAA Hole Transport Material in Perovskite Solar Cells
16:00 - 16:15 2C2-O3	<u>Zhong-En Shi</u> (<i>Ming Chi University of Technology</i>), Chih-Ping Chen Hole-Selective Material Design for Indoor Photovoltaic Applications
16:15 - 16:30 2C2-O4	<u>Chih-Lin Wang</u> (<i>Department of Materials Engineering, Ming Chi University of Technology, New Taipei City, Taiwan</i>), Chih-Ping Chen Molecular Interface Engineering Using Carbazole SAMs toward High-Efficiency Wide-Bandgap Perovskite Indoor Photovoltaics
16:30 - 16:45 2C2-O5	<u>Chih-I Chang</u> (<i>Department of Chemical Engineering, National Chung Hsing University, 145 Xingda Road, Taichung 402, Taiwan.</i>), Cheng-Yan Sung, Chieh-Ting Lin Enhancing Perovskite Solar Cell Efficiency through Tuning Donor-Acceptor Copolymer Structures and Self-Assembled Monolayer Interface Engineering
Session 2C3	
15:00 - 15:30 2C3-IS1	<u>Jin Young Kim</u> (<i>Department of Materials Science and Engineering, Seoul National University, Seoul 08826, Republic of Korea</i>) Interface engineering between subcells in perovskite-based tandems
15:30 - 15:45 2C3-O1	<u>Dimitris Chalkias</u> (<i>Nanotechnology & Advanced Materials Laboratory, Department of Electrical and Computer Engineering, University of the Peloponnese, GR26334 Patras, Greece</i>), Argyroula Mourtzikou, Archontoula Nikolakopoulou, Marina Kordouli, Elias Stathatos A Scalable and Sustainable Manufacturing Route for Carbon-Based Perovskite Solar Modules Enabled by Piezoelectric Drop-on-Demand Inkjet Printing



15:45 - 16:00 2C3-02	<u>Jie Zhao</u> (<i>Australian Centre for Advanced Photovoltaics, Department of Chemical and Biological Engineering, Monash University, Clayton, VIC, Australia.</i>), Udo Bach Toward Scalable, Efficient, and Stable Perovskite Solar Cells: From Ink Design to Interface Passivation
16:00 - 16:15 2C3-03	Andreia de Morais, Cleonilson Barbosa, Marcelo Hirata, Ana Nogueira, <u>Jilian de Freitas</u> (<i>Centro de Tecnologia da Informação Renato Archer - CTI - Campinas-SP, Brazil</i>) Low-cost materials extracted from locally available ores for application in perovskite solar cells
16:15 - 16:30 2C3-04	<u>Saurabh Srivastava</u> (<i>Department of Materials Science and Engineering, Indian Institute of Technology Kanpur, Kanpur, Uttar Pradesh, India</i>), Sudhir Ranjan, Harishankar Suman, Shailesh Kumar Sah, Raju Kumar Gupta, Ashish Garg Tailoring Precursor-Solvent Coordination Controls the Crystallization Kinetics and Nuclei Growth for Phase Homogenization in Wide-Bandgap Perovskite Solar Cells
16:45 - 17:45	Poster Session
19:30 - 22:00	Social dinner



January 15th - Day 3 (Thursday) 3

08:50 - 09:00

Announcement of the day**Session 3A**09:00 - 09:45
3A-K1Hyun Suk Jung (SKKU Institute of Energy Science and Technology (SIEST), Sungkyunkwan University (SKKU), 2066, Seobu-ro, Jangan-gu, Suwon, Gyeonggi-do 16419, Republic of Korea)

Toward Sustainable Perovskite Solar Cells: Advancements in Recycling, Green Processing, and Commercial Viability

09:45 - 10:15
3A-I1Hideo Ohkita (Kyoto University), Takumi Nobuoka, Kazuki Kohzaki, Insub Noh, Shunsuke Yamamoto, Hyung Do Kim

Interfacial Charge Dynamics in Polymer and Perovskite Optoelectronics

10:15 - 10:45
3A-I2Min Jae Ko (Department of Chemical Engineering, Hanyang University, Seoul 04763, Korea)

Sustainable Self-Healing Perovskite Solar Cells Employing Multifunctional Dendrimers for Efficient Capture and Release of Perovskite Volatiles

10:45 - 11:15

Coffee Break**Session 3B**

11:15 - 11:45

Zhanglin Guo (International Institute for Carbon-Neutral Energy Research (WPI-I2CNER), Kyushu University, Japan.)

Interfacial Molecule Design and Discovery for Perovskite Solar Cells

11:45 - 12:15
3B-I3Kyungkon Kim (Ewha Womans University)

Vacuum-Processable Additive for Vacuum Processed Perovskite Solar Cells

12:15 - 12:20

Industry talk

12:20 - 12:50

Atsushi Wakamiya (Institute for Chemical Research, Kyoto University, Japan)

Interface Materials for Efficient Perovskite Photovoltaics

12:50 - 13:20
3B-I2Shuzi Hayase (The University of Electro-Communications)

Stability of tin-based perovskite

13:20 - 15:00

Lunch Break**Session 3C1**

15:00 - 15:30

Mónica Morales-Masis (Eindhoven University of Technology (TU/e))

Pulsed Laser Deposition of Metal Halide Perovskites: from epitaxy to efficient solar cell devices

15:30 - 15:45
3C1-O5Juan F. Benitez-Rodriguez (Department of Materials Science and Engineering, Monash University, Clayton, Victoria, 3800 Australia), Junlin Yan, Naeimeh Mozaffari, Jacek JasieniakUnderstanding the Surface Recombination of Vacuum Deposited SnO₂ Thin Films for Perovskite Solar Cells15:45 - 16:00
3C1-O4In Hwan Jung (Department of Organic and Nano Engineering, Hanyang University, Seoul, South Korea.)

Development of Vacuum-Depositible Organic Materials for Perovskite and Organic Optoelectronic Devices

16:00 - 16:15
3C1-O3Kelvin Nosakhare Equavoen (Interdisciplinary Centre for Energy Research, Indian Institute of Science, Bengaluru, 560012, Karnataka, India), Praveen C Ramamurthy

Sustainability Assessment of Reused Thermal Evaporation Materials in Perovskite Solar Cell Electron Transport Layers

16:15 - 16:30
3C1-O2Miguel Ángel Sevillano-Bendezú (IMN-Instituto de Micro y Nanotecnología (CNM-CSIC)), Micaela Rodríguez Peña, Jerónimo Buencuerpo, José María Ripalda

AI-Based Modeling of Solar Spectra Using Few Meteorological Inputs

16:30 - 16:45
3C1-O1Christopher Bailey (The University of Sydney, School of Physics, Sydney, Australia), Nicholas Sloane, Tik Lun-Leung, Chwenhaw Liao, Adrian Mena, Damon de Clercq, Jianpeng Yi, Stefano Palomba, Michael Nielsen, David McKenzie, Timothy Schmidt, Dane McCamey, Anita Ho-Baillie

Influencing Magneto-Optical Properties of 2D Perovskites

Session 3C215:00 - 15:30
3C2-IS1Shafna Kunnathum Peedika, Vidya Kattoor, Tzu-Chien Wei (Department of Chemical Engineering, National Tsing Hua University, Hsinchu, 300044, Taiwan, Republic of China.)Single-Crystal Precursor Engineering for Pb₂-Free and Halide-Stable Perovskite Solar Cells15:30 - 15:45
3C2-O1Min Hsuan Tsai (Department of Chemical Engineering National Chung Hsing University), Heng Yi Lin, Shi-Chun Liu, Chieh-Ting Lin

Synergistic Buried Interface Engineering for Stable Perovskite Solar Cells

15:45 - 16:00
3C2-O5Kelvian T. Mularso (School of Advanced Materials Science and Engineering, Sungkyunkwan University (SKKU)), Bonghyun Jo, Oh Yeong Gong, Jongin Huh, Seo-Ryeong Lee, Seung-Gu Choi, Mahnmin Choi, Sohee Jeong, Nam-Gyu Park, Jin-Wook Lee, Hyun Suk Jung

2D Perovskite Induced Back Surface Field for Efficient and Stable Electron-Transport-Layer-Free Perovskite Solar Cells

16:00 - 16:15
3C2-O4SADOK BEN DKHIL (Dracula Technologies, France, 26000 Valence (FR))

Advances in Indoor Organic Photovoltaics for Powering IoT Devices - Scaling Up and Enhancing Stability

16:15 - 16:30
3C2-O3Ting-Ying Huang (Department of Materials Engineering, Ming Chi University of Technology, New Taipei City, 24301, Taiwan.), Chih-Ping Chen

A Multifunctional Perylene Diimide Interlayer for Efficient Organic and Hybrid Perovskite Photovoltaics

16:30 - 16:45
3C2-O2Shu-Yu Yang (Department of Chemical Engineering, National Chung Hsing University, 145 Xingda Road, Taichung 402, Taiwan.), Chih-Ching Kuo, Chieh-Ting LinControlled oxidation and thermal stress strategies for defect passivation and stress relaxation in CsPbI₂Br perovskite solar cells**Session 3C3**15:00 - 15:30
3C3-IS1Cojocar Ludmila (Komaba Institute for Science, Graduate School of Arts and Sciences, The University of Tokyo, Japan), Kumar Ajay Jena, Kubo Takaya, Uchida Satoshi, Hiroshi SegawaDeveloping eco-friendly, solution-processed AgBiS₂ thin film solar cells15:30 - 15:45
3C3-O5Mohith Balaji M (VIT - Vellore Institute of Technology, IN)

High-Efficiency Inorganic Double Perovskite Solar Cell

15:45 - 16:00
3C3-O4Yukta Yukta (Centre for Analysis and Synthesis, Lund University, 22100 Lund, Sweden), Sunardi Rahman, Maning Liu

Lattice Engineering of Lead-Free Layered Double Perovskite Nanocrystals for Photoelectrochemical Applications



16:00 - 16:15 3C3-03	<u>Thi Hieu Hoang</u> (<i>Université Paris-Saclay, UMR 8000 CNRS, Institut de Chimie Physique, Orsay, 91405</i>), David Berardan, Mohamed Nawfal Ghazzal Ghazzal CsPbBr ₃ Perovskites Confined in TiO ₂ Hollow Microspheres for High-Performance Biomass Oxidation
16:15 - 16:30 3C3-02	<u>Krishnapressad Vijayan</u> (<i>Crystal Growth and Thin Film Laboratory, Department of Physics, Bharathidasan University, Tiruchirappalli-620 024, Tamil Nadu, India.</i>), Soumya Sundar Parui, Ramesh Babu R Exploring Lead-Free Cs ₃ Bi ₂ I ₉ Perovskites for Eco-Friendly Solar Cells: A Combined Simulation and Experiment Study
16:30 - 16:45 3C3-01	<u>Subha Sadhu</u> (<i>Banaras Hindu University</i>) Methylammonium Iodo Bismuthate Perovskite: A New Electrocatalyst for Green Ammonia Production
16:45 - 16:55	Break
Session 3D	
16:55 - 17:40 3D-K1	<u>Udo Bach</u> (<i>Chemical Engineering, Monash University / CSIRO</i>) TBA
17:40 - 18:25 3D-K2	<u>Hong Lin</u> (<i>School of Materials Science and Engineering, Tsinghua University, Beijing, 10084, China</i>) DMSO Extraction Engineering: Enabling Controlled Crystallization and High-Performance Perovskite Solar Cells
18:25 - 18:35	Closing and Awards Ceremony

**Poster Contribution**

034	<u>Huong Le Thi Cam</u> (<i>Department of Materials Science and Engineering, Chungnam National University, Daejeon, 34134, Republic of Korea</i>), Jihoon Choi Enhancement of Ambient Stability of Perovskite Solar Cells via Lead Chalcogenide Engineering
036	<u>Dung Nguyen Khac</u> (<i>Department of Materials Science and Engineering, Chungnam National University, Daejeon, 34134, Republic of Korea</i>), Jihoon Choi Dual Strategy for High-Performance Blue Perovskite LEDs via Strontium Ion Substitution and Molecular Additives
051	<u>Anna Lang</u> (<i>Linköping university</i>), Feng Gao, Mats Fahlman, Fengling Zhang Wood-based Materials for Organic Photovoltaics - Replacing ITO on flexible Substrates