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: Auditorium Chair: Seigo Ito
15:00 - 15:45 Auditorium-K1	Hiroshi Segawa *(Research Center for Advanced Science and Technology, The University of Tokyo, Tokyo, Japan.)* Material Engineering toward High Performance Perovskite Solar Cells and Modules
15:45 - 16:15 Auditorium-I1	Marina Freitag *(School of Natural and Environmental Science, Newcastle University, Newcastle upon Tyne, United Kingdom)* Diffuse Light to Structured Information with Hybrid Photovoltaics
16:15 - 16:45 Auditorium-I2	Yasuhiko Hayashi *(Okayama University)*, Hiroo Suzuki Additive engineering with phenolphthalein for ambient-air-stable high performance FAPbI3 perovskite solar cells
16:45 - 18:30	**Welcome Reception**

January 14th - Day 2 (Wednesday) 2	
08:55 - 09:00	**Opening and announcement of the day**
	Session 2A: Auditorium Chair: Hyunjung Shin
09:00 - 09:45 Auditorium-K1	Liyuan Han *(School of Materials Science & Engineering, Shanghai Jiao Tong University,800 Dongchuan Rd, 200240, China)* Perovskite solar cells towards commercialization: Progress and Future Prospects
09:45 - 10:15 Auditorium-I1	Toshinori Matsushima *(International Institute for Carbon-neutral Energy Research (WPI-I2CNER), Kyushu University)* Achieving Durable and Efficient Perovskite Solar Cells through Material and Interface Optimization
10:15 - 10:45 Auditorium-I2	Annalisa Bruno *(Energy Research Institute @ NTU, Nanyang Technological University, Research Techno Plaza, 50 Nanyang Drive, Singapore 637553)* Customized Growth of Perovskites for Advanced Photovoltaics and Optoelectronic Devices
10:45 - 11:15	**Coffee Break**
	Session 2B: Auditorium Chair: Marina Freitag
11:15 - 11:45 Auditorium-I1	Nam-Gyu Park *(Sungkyunkwan University (SKKU))* Perovskite photovoltaics: The revolution of solar energy
11:45 - 12:15 Auditorium-I2	Takurou Murakami *(National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan)* Materials and Processes for the Commercialization of Durable Perovskite Solar Cells
12:15 - 12:20 Auditorium-S1	Taro Tanabe *(Tokyo Chemical Industry)* Tokyo Chemical Industry talk
12:20 - 12:50 Auditorium-I3	Tsutomu Miyasaka *(Toin University of Yokohama, Peccell Technologies, Inc.)* Interfacial Molecular Organization for Next-generation Perovskite Solar Cells
12:50 - 13:20 Auditorium-I4	Jin Young Kim *(Department of Materials Science and Engineering, Seoul National University, Seoul 08826, Republic of Korea)* Interface engineering between subcells in perovskite-based tandems
13:20 - 15:00	**Lunch Break**
	Session 2C1: Room 1 Chair: Annalisa Bruno
15:00 - 15:30 1-IS1	Iván Mora-Seró *(Institute of Advanced Materials (INAM), Universitat Jaume I, Castelló, 12006 Spain)* Sn-Based Halide Perovskites: A Lead-Free Alternative
15:30 - 15:45 1-O1	Christopher 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
15:45 - 16:00 1-O2	Runmin Tao *(School of Physics, The University of Sydney, Sydney, NSW 2006, Australia)*, 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, Annita W.Y. Ho Baillie pH Modulation for Self-Assembly-Monolayer Type Hole Transport Layer for Efficient and Stable Perovskite-Silicon Double-Junction Solar Cells
16:00 - 16:15 1-O3	Giacomo Giorgi *(Department of Civil & Environmental Engineering (DICA), Via G. Duranti 93, I-06125 Perugia, The University of Perugia, Italy)*, Maurizia Palummo, Koichi Yamashita Structural, Electronic, and Optical Properties of Pb-Free Perovskites: Dimensional Evolution from Bulk to 2D Architectures
16:15 - 16:30 1-O4	Kai-Chun Chang *(Department of Chemical Engineering, National Chung Hsing University, 145 Xingda Road, Taichung 402, Taiwan.)*, 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 1-O5	Henning Richter *(Nano-C)*, Edward Jackson, Darren Bischoff, Hossein Ghiassi, Ryan Carty, Bryan Schofield, Thomas Lada, Melissa Ricci, Matthias Kollosche, Paul Brookes Materials enabling new-generation organic and perovskite photovoltaics
	Session 2C2: Symposium Room Chair: Takurou Murakami
15:00 - 15:30 Room-IS1	Juan Bisquert *(Instituto de Tecnología Química, Universitat Politècnica de València-Consejo Superior de Investigaciones Científicas, Av. de los Naranjos s/n, 46022 Valencia, Spain.)* Insights into Hysteresis, Time Constants, and Degradation Mechanisms in Perovskite Solar Cells from Impedance and Transient Analyses
15:30 - 15:45 Room-O1	David Hardy *(Linköping University, Sweden)*, 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 Room-O2	Naoyuki Nishimura *(National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan)*, Hiroyuki Kanda, Ryuzi Katoh, Atsushi Kogo, Takurou N. Murakami Spontaneous Perovskite Passivators Tailored for PTAA Hole Transport Material in Perovskite Solar Cells
16:00 - 16:15 Room-O3	Zhong-En Shi *(Ming Chi University of Technology)*, Chih-Ping Chen Hole-Selective Material Design for Indoor Photovoltaic Applications
16:15 - 16:30 Room-O4	Chih-I Chang *(Department of Chemical Engineering, National Chung Hsing University, 145 Xingda Road, Taichung 402, Taiwan.)*, Cheng-Yan Sung, Chieh-Ting Lin Enhancing Perovskite Solar Cell Efficiency through Tuning Donor-Acceptor Copolymer Structures and Self-Assembled Monolayer Interface Engineering
16:30 - 16:45 Room-O5	Zhilong Zhang *(School of Emergent Soft Matter, South China University of Technology)* Exciton Delocalization in Quantum Dots and Implications to Inorganic - Organic Spectral Converters
	Session 2C3: Room 3 Chair: Jin Young Kim

15:00 - 15:30 3-IS1	Chu Zhang, Jiaze Sun, Tingli Ma *(China Jiliang University, Hangzhou, P. R. China)* Interface passivation with small molecules for improving performance of perovskite solar cells
15:30 - 15:45 3-O1	Dimitris Chalkias *(Nanotechnology & Advanced Materials Laboratory, Department of Electrical and Computer Engineering, University of the Peloponnese, GR26334 Patras, Greece)*, 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 3-O2	Jie Zhao *(Australian Centre for Advanced Photovoltaics, Department of Chemical and Biological Engineering, Monash University, Clayton, VIC, Australia.)*, Udo Bach Toward Scalable, Efficient, and Stable Perovskite Solar Cells: From Ink Design to Interface Passivation
16:00 - 16:15 3-O3	Ting-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
16:15 - 16:30 3-O4	Chih-Lin Wang *(Department of Materials Engineering, Ming Chi University of Technology, New Taipei City, Taiwan)*, Chih-Ping Chen Molecular Interface Engineering Using Carbazole SAMs toward High-Efficiency Wide-Bandgap Perovskite Indoor Photovoltaics
16:30 - 16:45 3-O5	Hiroyuki Kanda *(National Institute of Advanced Industrial Science and Technology (AIST))*, Santa Mondal, Naoto Eguchi, Naoyuki Nishimura, Yoyo Hinuma, Kohei Yamamoto, Masaki Yumoto, Kenichi Tashiro, Hideyuki Takada, Aiko Narazaki, Takashi Koida, Takurou N. Murakami Heteroaryl Derivatives for Hole-Transport Layers Improve Thermal Stability of Perovskite Solar Cells + Outdoor Stability
16:50 - 18:00	**Poster Session**
19:30 - 22:00	**Social dinner**

January 15th - Day 3 (Thursday) 3	
08:55 - 09:00	**Opening and announcement of the day**
	Session 3A: Auditorium Chair: Toshinori Matsushima
09:00 - 09:45 Auditorium-K1	Hyun 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 Auditorium-I1	Hideo Ohkita *(Kyoto University)*, Takumi Nobuoka, Kazuki Kohzuki, Insub Noh, Shunsuke Yamamoto, Hyung Do Kim Interfacial Charge Dynamics in Polymer and Perovskite Optoelectronics
10:15 - 10:45 Auditorium-I2	Hyunjung Shin *(SKKU Institute of Energy Science and Technology (SIEST), Sungkyunkwan University (SKKU), 2066, Seobu-ro, Jangan-gu, Suwon, Gyeonggi-do 16419, Republic of Korea)* Centrosymmetry Breaking in Cubic □-FAPbI3 Films and Perovskite Solar Cells Enabled by ALD (Atomic Layer Deposition)
10:45 - 11:15	**Coffee Break**
	Session 3B: Auditorium Chair: Iván Mora-Seró
11:15 - 11:45 Auditorium-I4	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 Auditorium-I3	Kyungkon Kim *(Ewha Womans University)* Vacuum-Processable Additive for Vacuum Processed Perovskite Solar Cells
12:15 - 12:20 Auditorium-S1	Darren Bischoff *(Nano-C)* Nano-C Talk
12:20 - 12:50 Auditorium-I1	Atsushi Wakamiya *(Institute for Chemical Research, Kyoto University, Japan)* Interface Materials for Efficient Perovskite Photovoltaics
12:50 - 13:20 Auditorium-I2	Shuzi Hayase *(The University of Elecro-Communications)* Stability of tin-based perovskite
13:20 - 15:00	**Lunch Break**
	Session 3C1: Room 1 Chair: Naoyuki Nishimura
15:00 - 15:30 1-IS1	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 1-O1	Miguel 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
15:45 - 16:00 1-O2	In Hwan Jung *(Department of Organic and Nano Engineering, Hanyang University, Seoul, South Korea.)* Development of Vacuum-Depositable Organic Materials for Perovskite and Organic Optoelectronic Devices
16:00 - 16:15 1-O3	Kelvin Nosakhare Eguavoen *(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 1-O4	Juan F. Benitez-Rodriguez *(Department of Materials Science and Engineering, Monash University, Clayton, Victoria, 3800 Australia)*, Junlin Yan, Naeimeh Mozaffari, Jacek Jasieniak1 Understanding the Surface Recombination of Vacuum Deposited SnO2 Thin Films for Perovskite Solar Cells
	Session 3C2: Symposium Room Chair: Hiroyuki Kanda
15:00 - 15:30 Room-IS1	Shafna 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 PbI_2-Free and Halide-Stable Perovskite Solar Cells
15:30 - 15:45 Room-O1	Min 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 Room-O2	Kelvian 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 Room-O3	Shu-Yu Yang *(Department of Chemical Engineering, National Chung Hsing University, 145 Xingda Road, Taichung 402, Taiwan.)*, Chih-Ching Kuo, Chieh-Ting Lin Controlled oxidation and thermal stress strategies for defect passivation and stress relaxation in $CsPbI_2Br$ perovskite solar cells
	Session 3C3: Room 3 Chair: Hideo Ohkita
15:00 - 15:30 3-IS1	Cojocaru Ludmila *(Komaba Institute for Science, Graduate School of Arts and Sciences, The University of Tokyo, Japan)*, Kumar Ajay Jena, Kubo Takaya, Uchida Satoshi, Hiroshi Segawa Developing eco-friendly, solution-processed AgBiS2 thin film solar cells
15:30 - 15:45 3-O1	Mohith Balaji M *(VIT - Vellore Institute of Technology, IN)* High-Efficiency Inorganic Double Perovskite Solar Cell
15:45 - 16:00 3-O2	Yukta 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 3-O3	Thi Hieu Hoang *(Université Paris-Saclay, UMR 8000 CNRS, Institut de Chimie Physique, Orsay, 91405)*, David Berardan, Mohamed Nawfal Ghazzal Ghazzal $CsPbBr_3$ Perovskites Confined in TiO_2 Hollow Microspheres for High-Performance Biomass Oxidation
16:15 - 16:30 3-O4	Subha Sadhu *(Banaras Hindu University)* Methylammonium Iodo Bismuthate Perovskite: A New Electrocatalyst for Green Ammonia Production

16:30 - 16:50	**Liquid Coffee Break**
	Session 3D: Auditorium Chair: Yutaka Matsuo
16:50 - 17:35 Auditorium-K1	Udo Bach *(Australian Centre for Advanced Photovoltaics, Department of Chemical and Biological Engineering, Monash University, Clayton, VIC, Australia.)* Autonomous Photovoltaic Materials Discovery and Photoinduced Halide Dynamics in Lead Halide Perovskites
17:35 - 17:40 Auditorium-S1	Jeffrey Lee *(KoreaKiyon Co., Ltd.)* Integrated Perovskite PV Solutions: R&D to Scale-Up
17:40 - 18:25 Auditorium-K2	Hong Lin *(School of Materials Science and Engineering, Tsinghua University, Beijing, 10084, China)* DMSO Extraction Engineering: Enabling Controlled Crystallization and High-Performance Perovskite Solar Cells
18:25 - 18:35	**Closing and Awards Ceremony**

Poster Contribution

034	Huong Le Thi Cam *(Department of Materials Science and Engineering, Chungnam National University, Daejeon, 34134, Republic of Korea)*, Jihoon Choi Enhancement of Ambient Stability of Perovskite Solar Cells via Lead Chalcogenide Engineering
036	Dung Nguyen Khac *(Department of Materials Science and Engineering, Chungnam National University, Daejeon, 34134, Republic of Korea)*, Jihoon Choi Dual Strategy for High-Performance Blue Perovskite LEDs via Strontium Ion Substitution and Molecular Additives
051	Anna Lang *(Linköping university)*, Feng Gao, Mats Fahlman, Fengling Zhang Wood-based Materials for Organic Photovoltaics - Replacing ITO on flexible Substrates
064	Eunchi Kim *(IMD3-Photovoltaics, Forschungszentrum Jülich GmbH, 52425 Jülich, Germany)*, Paula Hartnagel, Babara Urbano, Leonard Christen, Thomas Kirchartz Inferring Material Parameters from Current-Voltage Curves in Organic Solar Cells with Neural-Network-Based Surrogate Models
065	joaquim puigdollers *(UPC dept eng electronica. Barcelona (Spain))*, pau estarlich, gustavo hernando alvarez, jose miguel asensi, cristobal voz, gerard masmitjà Optoelectronic Properties of Doped ZnO TCO Films Prepared by ALD
067	The Duong *(School of Engineering, The Australian National University, Canberra 2601, Australia)*, Viqar Ahmad, Qian Cui, Heping Shen, Klaus Weber Efficient and Scalable Hole Transport Layer Stack for Monolithic Perovskite-Silicon Tandems Solar Cells
069	Nobuko Onozawa-Komatsuzaki *(National Institute of Advanced Industrial Science and Technology (AIST))*, Takashi Funaki, Atsushi Kogo, Takurou N. Murakami Inverted perovskite solar cells based on thienyl substituted carbazole-typed self-assembled monolayer (SAM)
070	Achmad Syarif Hidayat *(Department of Chemical Systems Engineering, Graduate School of Engineering, Nagoya University, Nagoya, Aichi, Japan.)*, Naoki Ueoka, Hisayoshi Oshima, Yoshimasa Hijikata, Yutaka Matsuo Exploiting Perylene- and Naphthalene-Based Planar Aromatic n-Type Dopants for SWCNT Cathodes in Inverted Perovskite Solar Cells
071	Seongsik Nam *(SKKU Advanced Institute of Nanotechnology (SAINT), Sungkyunkwan University, Suwon, Republic of Korea,)*, Seong Sik Shin Excess Ligand-Engineered SnO_2Enables Efficient and Luminescent Perovskite Solar Cells
072	Junzhuo WANG *(Department of Chemical Systems Engineering, School of Engineering, Nagoya University)*, Yongchang ZHAI, Xuelin ZHENG, Rui ZHANG, Achmad Syarif Hidayat, Chuyang YU, Qiao CHEN, Naoki UEOKA, Hiroshi OKADA, Miftakhul HUDA, Yutaka MATSUO Spray-coated n-Type Carbon Nanotubes Transparent Electrodes for Organic Solar Cells
073	Rui Zhang *(Department of Chemical System Engineering, Graduate School of Engineering, Nagoya University.)*, Kazuhira Miwa, Naoki Ueoka, Chuyang Yu, Xuelin Zheng, Yutaka Matsuo Sequential Synergistic Interfacial Passivation with a Fullerene Derivative for Efficient and Stable Inverted Perovskite Solar Cells
074	Hyunji RYU *(Ewha Womans University)*, Kyungkon KIM Novel Phenazine-Based Electron Transport Materials as C60 Alternatives for Perovskite Solar Cells
075	Meda Surdokaitė *(Department of Organic Chemistry, Kaunas University of Technology, Lithuania)*, Vytautas Getautis, Artiom Magomedov Synthesis and investigation of the π-expanded hole-transporting materials
076	Saho Kobayashi (Kajikawa) *(Graduate School of Science, Japan Women's University, Japan)*, Masanori Kaneko, Takahito Nakajima, Koichi Yamashita, Azusa Muraoka Double Perovskite Band Gap Prediction Using Explainable Machine Learning with SHAP
077	Yunjeong Kang *(Ewha Womans University, Department of Physics, Seoul 03760, Korea.)*, Kyungkon Kim Improving CsFAPbI3 Crystallinity through a Urea-Based Additive in Sequential Evaporation
078	Seongrok Seo *(Ulsan National Institute of Science and Technology (UNIST), KR)*, Hongjae Shim, Jae Sung Yun A-Site Cation Stabilization with $PDAI_2$ for Enhanced Radiation Tolerance of Wide-Band-Gap Perovskite Solar Cells in Space Environments
079	Miya Matsuzaki *(Graduate School of Science, Japan Women's University, Japan)*, Mina Shimamoto, Achmad Syarif Hidayat, Naoki Ueoka, Yutaka Matsuo, Koichi Yamashita, Azusa Muraoka DFT Study of Electronic States and Thermoelectric Properties of n-Type Doped Carbon Nanotubes
080	Chihiro Sakamoto *(Institute for Chemical Research, Kyoto University)*, Shota Hira, Amaar Hussein, Richard Murdey, Minh Anh Truong, Tomoya Nakamura, Thomas Baumgartner, Atsushi Wakamiya Cationic Dithienophosphinine for Electron Collection Monolayers in Perovskite Solar Cells
081	Ryan Schork *(Karlsruhe Institute of Technology (KIT), P.O. Box 3640, 76021 Karlsruhe, Germany)*, Kai Trombotto Herfert, Bernhard Holzapfel PLD fabrication of BaNbO2N thin films for solar cells – chances and challenges
083	Ranush Durgaryan *(Uppsala university, Department of Chemistry - Ångström Laboratory; Physical Chemistry, Ångströmlaboratoriet, Lägerhyddsvägen)*, Gerrit Boschloo Tailoring Electron Transport in Perovskite Solar Cells via Molecular Self-Assembly