#### 2025년 2월 12일(수)-14일(금) | 강원도 하이원리조트

### Future Normal in Semiconductor

2025-02-14(금), 15:10-17:10

좌장: 추후업데이트 예정

# P. Device for Energy (Solar Cell, Power Device, Battery, etc.) 분과 [FI3-P] Solar Cell

초청 FI3-P-1 15:10-15:40	Buried interface study for Sn-Pb perovskite solar cells for tandem applications  Dong Hoe Kim  Department of Materials Science and Engineering, Korea University
FI3-P-2 15:40-15:55	Interface Modification for Enhanced Charge Transport under Low-Light Conditions in Perovskite Indoor Photovoltaics Seok Beom Kang <sup>1</sup> , Jae Ryoung Lee <sup>1</sup> , Joo Woong Yoon <sup>1</sup> , Jung Jun Kim <sup>1</sup> , and Dong Hoe Kim <sup>2</sup> Korea University
FI3-P-3 15:55-16:10	3Inch InGaP/GaAs Thin-film Solar Cell For Space Application Sukkyu Hong <sup>1,2</sup> , Seungwan Woo <sup>1</sup> , Sung-min Lee <sup>2</sup> , and Won Jun Choi <sup>1</sup> ¹Center for Quantum Technology, KIST, ²Department of Electrical Engineering, Hanyang University
FI3-P-4 16:10-16:25	15.2% efficient InGaP/GaAs/Si triple-junction solar cell with direct growth of n-GaAs buffer on GaP/Si Yeonhwa Kim <sup>1,2</sup> , Hyunbeom Shin <sup>3</sup> , Eunkyo Ju <sup>1,2</sup> , Tsimafei Laryn <sup>1,4</sup> , In-Hwan Lee <sup>2</sup> , Ho Kwan Kang <sup>3</sup> , Won Jun Choi <sup>1</sup> , Daehwan Jung <sup>1,4</sup> <sup>1</sup> Center for Quantum Technology, KIST, <sup>2</sup> Department of Materials Science and Engineering, Korea University, <sup>3</sup> KANC, <sup>4</sup> Division of Nanoscience and Technology, KIST School at Korea National University of Science and Technology
FI3-P-5 16:25-16:40	p-CuAlO <sub>2</sub> /β-Ga <sub>2</sub> O <sub>3</sub> Interfaces: Self-Powered Photodetector with Improved Linear Dynamic Range and Stability Chowdam Venkata Prasad <sup>1,2</sup> , Madani Labed, and You Seung Rim <sup>1,2</sup> ¹Department of Semiconductor Systems Engineering and Convergence Engineering for Intelligent Drone, Sejong University, ²Institute of Semiconductor and System IC, Sejong University



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	Cathode Interfacial Engineering with Quinoxaline-Phosphine Oxide-
FI3-P-6 16:40-16:55	Based Molecules for Wide-Bandgap Perovskite Solar Cells
	Jihyeon Heo <sup>1,2</sup> , Juan Anthony Prayogo <sup>3</sup> , Dong Ryeol Whang <sup>4</sup> , Dong Wook Chang <sup>3</sup> , and Hui Joon Park <sup>1,2,5</sup>
	<sup>1</sup> Department of Organic and Nano Engineering, Hanyang University, <sup>2</sup> Human-Tech
	Convergence Program, Hanyang University, <sup>3</sup> Department of Industrial Chemistry and
	CECS Research Institute, Pukyong National University, <sup>4</sup> Division of Advanced
	Materials, Hannam University, <sup>5</sup> Department of Semiconductor Engineering, Hanyang
	University
	Buried Interface Modulation via PEDOT:PSS Ionic Exchange for Sn-Pb
	Mixed Perovskite based Solar Cells
FI3-P-7	Sangheon Lee, Changyong Kim, Hyemin Lee, Seok Beom Kang, Joo Woong Yoon,
16:55-17:10	Ayoung Lee, Jae Ryoung Lee, Sang Jun Park, Min Hyeok Park, Jung Jun Kim, and
	Dong Hoe Kim
	Department of Materials Science and Engineering, Korea University