



# 제 29회 한국반도체학술대회

The 29th Korean Conference on Semiconductors

2022년 1월 24일(월)~ 26일(수) | 강원도 하이원 그랜드호텔(컨벤션타워)

2022년 1월 25일(화), 09:00-10:30

Room I (하트 II, 6층)

## P. Device for Energy (Solar Cell, Power Device, Battery, etc.) 분과

### [T11-P] Solar Energy Conversion Device

좌장: 박정웅 교수(가천대학교)

<p>T11-P-1 09:00-09:30</p>	<p><b>Advanced Analysis for Si PV Using Injection Dependent Lifetime and PL Imaging Technology</b> Sungeun Park, Sang Hee Lee, Chelwook Kwon, Kwan Hong Min, Hee-eun Song, and Min-Gu Kang <i>Photovoltaics Laboratory, KIER</i></p>
<p>T11-P-2 09:30-09:45</p>	<p><b>Study of Monolithic Al<sub>0.17</sub>Ga<sub>0.83</sub>As Single Junction Solar Cell Grown on Si toward High Efficiency III-V/Si Tandem Cell</b> Yeonhwa Kim<sup>1,2</sup>, Seungwan Woo<sup>1,3</sup>, Rafael Chu<sup>1,2</sup>, Jae-Hoon Han<sup>1</sup>, In-Hwan Lee<sup>3</sup>, Won Jun Choi<sup>1</sup>, and Daehwan Jung<sup>1,2</sup> <sup>1</sup>Center for Opto-electronic Materials and Devices, KIST, <sup>2</sup>Division of Nano and Information Technology, KIST School at University of Science and Technology, <sup>3</sup>Department of Materials Science and Engineering, Korea University</p>
<p>T11-P-3 09:45-10:00</p>	<p><b>High Contrast Visualization of Defects in Charge Transport Layers of Perovskite Solar Cells by Fluorescence Quenching</b> Hannah Kwon<sup>1</sup>, Hyejun Kim<sup>1</sup>, Hyun Chul Kim<sup>1</sup>, Seok Joon Kwon<sup>2</sup>, and In Soo Kim<sup>1</sup> <sup>1</sup>Nanophotonics Research Center, KIST, <sup>2</sup>School of Chemical Engineering, Sungkyunkwan University</p>
<p>T11-P-4 10:00-10:15</p>	<p><b>An Accurate and Dither-Free Maximum Power Point Tracking (MPPT) Algorithm for Photovoltaic Cells</b> Byoung Kyu Kim<sup>1</sup>, Jaeha Kim<sup>2</sup> <sup>1</sup>Inter-University Semiconductor Research Center, Seoul National University, <sup>2</sup>Department of Electrical and Computer Engineering, Seoul National University</p>
<p>T11-P-5 10:15-10:30</p>	<p><b>Electrical and Thermal Circuit Model for CIGS Photovoltaic Module</b> Yongki Kim<sup>1</sup>, Myunghun Shin<sup>1</sup>, Myeong-jin Lee<sup>1</sup>, and Yoonmook Kang<sup>2</sup> <sup>1</sup>Korea Aerospace University, <sup>2</sup>Korea University</p>