



## Future Normal in Semiconductor

2025년 2월 13일(목), 10:55-12:40

Room F(사파이어 I), 5층

### C. Material Growth & Characterization 분과

## 018\_[TF2-C] Characterization of Oxide Heterostructures for Advanced Applications

좌장: 김우진 교수(부산대학교), 김지운 교수(KAIST)

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| <p>초청<br/>TF2-C-1<br/>10:55-11:25</p> | <p><b><i>In-situ/Operando</i> Analysis of Topotactic Phase Transition in Complex Oxides</b><br/>Dooyong Lee<br/>Department of Physics Education, Kyungpook National University</p>   |
| <p>TF2-C-2<br/>11:25-11:40</p>        | <p><b>Spatially-Resolved Mapping of Ferroelectric Phase Transition in Two-Dimensional Halide Perovskite</b><br/>Tae Hyun Jung, Yunseung Kuk, Sang Woo Lee, Sung Bin Bae, June Hee Shin, Kang Min Ok, and Sang Mo Yang<br/>Sogang University</p>  |
| <p>TF2-C-3<br/>11:40-11:55</p>        | <p><b>Advanced Spectroscopic Methods for Probing In-Gap Defect States in Amorphous SiNx for Charge Trap Memory Applications</b><br/>Hyun Don Kim<sup>1,2</sup>, Minseon Gu<sup>1</sup>, Kyu-Myung Lee<sup>3</sup>, Hanyeol Ahn<sup>1</sup>, Jinwoo Byun<sup>4</sup>, Gukhyon Yon<sup>4</sup>, Junghyun Beak<sup>1,2</sup>, Hyeongjoon Lim<sup>1,2</sup>, Jaemo Jung<sup>1,2</sup>, Jaehyeon Park<sup>1,2</sup>, Jwa Soon Kim<sup>5</sup>, HaeJoon Hahm<sup>5</sup>, Soobang Kim<sup>5</sup>, Won Ja Min<sup>5</sup>, Moon Seop Hyun<sup>6</sup>, Yun Chang Park<sup>6</sup>, Gyungtae Kim<sup>6</sup>, Y<br/><sup>1</sup>Department of Physics, University of Seoul, <sup>2</sup>Department of Smart Cities, University of Seoul, <sup>3</sup>Department of Physics and Research Institute of Basic Sciences, Kyung Hee University, <sup>4</sup>Advanced Process Development Team, Semiconductor R&amp;D Center, Samsung Electronics Co., Ltd., <sup>5</sup>HB Solution, <sup>6</sup>National NanoFab Center (NNFC), <sup>7</sup>Department of Information Display, Kyung Hee University, <sup>8</sup>Department of Intelligent Semiconductor Engineering, University of Seoul</p> |
| <p>TF2-C-4<br/>11:55-12:10</p>        | <p><b>DFT Study on Schottky Barrier Heights in MoS<sub>2</sub> with Direct and van der Waals Contacts</b><br/>Hyunijn Lee<sup>1</sup>, Soheil Ghods<sup>1,2</sup>, Jinuk Kwon<sup>3</sup>, Yoon Kyeong Lee<sup>4,5</sup>, Jae-Hyun Lee<sup>2</sup>, Taehun Lee<sup>4,6</sup>, and Keun Heo<sup>1,3</sup><br/><sup>1</sup>School of Semiconductor and Chemical Engineering, Semiconductor Physics Research Center, Jeonbuk National University, <sup>2</sup>Department of Materials Science and Engineering</p>   |



# 제 32회 한국반도체학술대회

The 32nd Korean Conference on Semiconductors

2025년 2월 12일(수)-14일(금) | 강원도 하이원리조트

## *Future Normal in Semiconductor*

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|                        | and Department of Energy Systems Research, Ajou University, <sup>3</sup> School of Semiconductor Science & Technology, Jeonbuk National University, <sup>4</sup> School of Advanced Materials Engineering, Jeonbuk National University, <sup>5</sup> Department of Nano Convergence Engineering, Jeonbuk National University, <sup>6</sup> Hydrogen and Fuel Cell Research Center, Jeonbuk National University   |
| TF2-C-5<br>12:10-12:25 | <b>Impact of Bulk Traps on Polarization Switching in <math>\alpha</math>-In<sub>2</sub>Se<sub>3</sub> Ferroelectric Semiconductor FETs by Frequency Dispersive C-V Characteristics</b><br>Minah Park <sup>1</sup> , Sieun Lee <sup>1</sup> , Jaewook Yoo <sup>1</sup> , Seohyeon Park <sup>1</sup> , Hongseung Lee <sup>1</sup> , Hyeonjun Song <sup>1</sup> , Soyeon Kim <sup>1</sup> , Seongbin Lim <sup>1</sup> , Sojin Jung <sup>1</sup> , TaeWan Kim <sup>3</sup> , Peide D. Ye <sup>2</sup> , and Hagyoul Bae <sup>1</sup><br><sup>1</sup> Jeonbuk National University, <sup>2</sup> Purdue University, and <sup>3</sup> University of Seoul |
| TF2-C-6<br>12:25-12:40 | <b>Temperature-dependent {111}-Texture Transfer to Hf<sub>0.5</sub>Zr<sub>0.5</sub>O<sub>2</sub> Films from (111)-textured TiN Electrode and Its Impact on Ferroelectricity</b><br>Dong Hee Han <sup>1</sup> , Seung Yeon Kim <sup>2</sup> , Younghwan Lee <sup>3</sup> , Young Yong Kim <sup>4</sup> , Woojin Jeon <sup>2</sup> , and Min Hyuk Park <sup>1,5</sup><br><sup>1</sup> Seoul National University, <sup>2</sup> Kyung Hee University, <sup>3</sup> Chonnam National University, <sup>4</sup> PAL, POSTECH, <sup>5</sup> Institute of Engineering Research, Seoul National University   |