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

## Future Normal in Semiconductor

2025-02-13(목), 10:55-12:40

좌장: 추후업데이트 예정

#### D. Thin Film Process Technology 분과

### [TC2-D] Emerging Devices - II

| 초청<br>TC2-D-1<br>10:55-11:25 | Interface-Type Memristor Devices based on Transition Metal Oxides Synthesized via Atomic Layer Deposition Minjae Kim School of Materials Science and Engineering, Yeungnam University  |
|------------------------------|--|
| TC2-D-2<br>11:25-11:40       | The Influence of Plasma Energy for the Interface Layer Deposition on the Resistance Switching Properties of a-IGZO-Based Memory Devices  Haripriya G. R. <sup>1</sup> , Hee Yeon Noh <sup>1</sup> , Yerim Kim <sup>1</sup> , Hyunki Lee <sup>2</sup> , June-Seo Kim <sup>1</sup> , Myoung-Jae Lee <sup>1</sup> , and Hyeon-Jun Lee <sup>1</sup> Division of Nanotechnology, DGIST, <sup>2</sup> Division of Intelligent Robotics, DGIST  |
|                              | Electronic Threshold Switching of As-SiO <sub>2</sub> Selector: Charged Oxygen   |
| TC2-D-3<br>11:40-11:55       | Vacancy Model  Hye Rim Kim <sup>1</sup> , Tae Jun Seok <sup>1</sup> , Hyun Seung Choi <sup>1</sup> , Su Yong Park <sup>1</sup> , Tae Joo Park <sup>1</sup> , Tae  Jung Ha <sup>2</sup> , Jeong Hwan Song <sup>2</sup> , Soo Gil Kim <sup>2</sup> , Kyun Seong Dae <sup>3</sup> , Sang Gil Lee <sup>3</sup> , Jae  Hyuck Jang <sup>3</sup> , and Byung Joon Choi <sup>4</sup> <sup>1</sup> Department of Materials Science and Chemical Engineering, Hanyang University, <sup>2</sup> SK hynix, <sup>3</sup> Electron Microscopy and Spectroscopy Team, KBSI, <sup>4</sup> Department of  Materials Science and Engineering, Seoul National University of Science and  Technology |
|                              | High-Reliability Leaky-Integrate-and-Fire Neuron Devices Enabled by  |
| TC2-D-4                      | Carbon Doping for Holding Voltage Control and Their Applications   |
| 11:55-12:10                  | Jeong Hwan Song and Kim Gun Hwan  Department of System Semiconductor Engineering, Yonsei University  |
|                              | Polarity-dependent Memory Effect and Its Conduction Mechanism in   |
|                              | Ovonic Threshold Switch  |
| TC2-D-5                      | Hyun Wook Kim, Ju Hwan Park, Se Hwan Jeon, Yoon Jae Hong, and Byung Joon   |
| 12:10-12:25                  | Choi Department of Materials Science and Engineering, Seoul National University of Science and Technology  |

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|             | Reliability Characteristics of GeSbSeTe Devices According to In Doping |
|-------------|--|
| TC2-D-6     | Concentration  |
| 12:25-12:40 | Soohyun-Lee and Gun Hwan Kim   |
|             | Yonsei University  |