🕀 제 30회 한국반도체학술대회

The 30th Korean Conference on Semiconductors

2023년 2월 13일(월)~ 15일(수) | 강원도 하이원리조트(그랜드호텔 컨벤션타워)

## 2023년 2월 14일(화), 10:55-12:40 Room A (에메랄드 I, 5층)

## D. Thin Film Process Technology 분과 [TA2-D] Memory Devices

## 좌장: 한정환 교수(서울과학기술대학교), 전우진 교수(경희대학교)

| TA2-D-1<br>10:55-11:25<br>[초청] | Optimization of Self-rectifying Resistive Switching Memory for Application in<br>Hole-etched Vertical Array Configuration<br>Hae Jin Kim<br>Department of Electronic Materials Engineering, The University of Suwon   |
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| TA2-D-2<br>11:25-11:40         | Growth of High-k Rutile TiO <sub>2</sub> Thin Films on SnO <sub>2</sub> Layers Using Atomic Layer<br>Deposition for DRAM Capacitors<br>Daeun Lim <sup>1</sup> , Yeji Lee <sup>2</sup> , Jonghyun Kim <sup>2</sup> , Jina Kim <sup>3</sup> , Jeong Hwan Han <sup>3</sup> , Eun A Kim <sup>2</sup> ,<br>Seong-Yong Cho <sup>2</sup> , and Woongkyu Lee <sup>1</sup><br><sup>1</sup> Soongsil University, <sup>2</sup> Myongji University, <sup>3</sup> Seoul National University of Science and<br>Technology   |
| TA2-D-3<br>11:40-11:55         | Study on Electro-thermal Behavior of Ovonic Threshold Switch by In Situ<br>Thermal Imaging<br>Ju Hwan Park <sup>1</sup> , Myeong Jun Jung <sup>1</sup> , Ha Young Lee <sup>1</sup> , Gun Hwan Kim <sup>2</sup> , Min Kyu Yang <sup>3</sup> ,<br>and Byung Joon Choi <sup>1</sup><br><sup>7</sup> Seoul National University of Science and Technology, <sup>2</sup> KRICT, <sup>3</sup> Sahmyook University  |
| TA2-D-4<br>11:55-12:10         | The Controlled Nitrogen Profile and Amount in SiO <sub>2</sub> Thin Film Using Remote<br>Plasma Oxidation and Nitridation for DRAM Application<br>Moonsuk Choi <sup>1</sup> , Chaewon Kim <sup>1</sup> , Sunbum Kim <sup>1</sup> , Ji Hyeon Sim <sup>1</sup> , Hyeongjun Kim <sup>1</sup> ,<br>Juhwan Kim <sup>2</sup> , Junwoo Park <sup>2</sup> , Pilseong Jeong <sup>2</sup> , Sanghyun Ji <sup>3</sup> , and Changhwan Choi <sup>1</sup><br><sup>1</sup> Division of Materials Science and Engineering, Hanyang University, <sup>2</sup> Software Team,<br>AP Systems, <sup>3</sup> Semiconductor Equipment Department, AP Systems  |
| TA2-D-5<br>12:10-12:25         | Improved Energy Storage Performance of the Al-doped ZrO <sub>2</sub> with Anti-<br>ferroelectricity for Electrostatic Capacitors<br>Seung Won Lee, Youkyoung Oh, Min Ji Jeong, and Ji-Hoon Ahn<br>Department of Materials Science and Chemical Engineering, Hanyang University  |
| TA2-D-6<br>12:25-12:40         | <b>Crystallinity-dependent Low Current and Analog Switching Behavior of Ru Ion-Based Memristor</b><br>Ji Eun Kim <sup>1,2</sup> , Jae Uk Kwon <sup>1,2</sup> , Suk Yeop Chun <sup>1,3</sup> , Young Geun Song <sup>1</sup> , Doo Seok Jeong <sup>4</sup> , Chong-Yun Kang <sup>1,3</sup> , Seong Keun Kim <sup>1,3</sup> , Sahn Nahm <sup>2,3</sup> , and Jung Ho Yoon <sup>1</sup><br><sup>1</sup> <i>Electronic Materials Research Center, KIST,</i> <sup>2</sup> <i>Department of Materials Science and Engineering, Korea University,</i> <sup>3</sup> <i>KU-KIST Graduate School of Converging Science and Technology, Korea University,</i> <sup>4</sup> <i>Division of Materials Science and Engineering, Hanyang University</i> |