

The 21<sup>st</sup> Korean Conference on Semiconductors  
**제21회 한국반도체학술대회**  
February 24–26, 2014 / Hanyang University, Seoul, Korea

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K. Memory (Design & Process Technology) 분과

**[WK4-K] ReRAM Selectors, PCRAM Model, and DRAM Macro**

Date	Feb. 26, 2014 (Wed.)
Place	Room K / 제1공학관 502호 (# 502, Engineering Building I)

Session Chair: 김택승 박사(SK hynix), 조우영 박사(삼성전자)

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- WK4-K-1 17:15-17:30 Highly Uniform, Electroforming-Free, and Self-Rectifying Resistive Memory in Pt/Ta<sub>2</sub>O<sub>5</sub>/HfO<sub>2-x</sub>/TiN Structure**  
저자: Jung Ho Yoon, Seul Ji Song, Il-Hyuk Yoo, Jun Yeong Seok, Kyung Jean Yoon, Tae Eun Kwon, Tae Hyung Park, and Cheol Seong Hwang  
소속: Seoul National University
- WK4-K-2 17:30-17:45 S-doped TiO<sub>2</sub> as a Selection Diode for ReRAM**  
저자: Dae Eun Kwon<sup>1</sup>, Jong Ho Lee<sup>2</sup>, Jung Ho Yoon<sup>1</sup>, Seul Ji Song<sup>1</sup>, Kyung Jean Yoon<sup>1</sup>, Tae Hyung Park<sup>1</sup>, Tae Joo Park<sup>3</sup>, and Cheol Seong Hwang<sup>1</sup>  
소속: <sup>1</sup>Department of Materials Science and Engineering, Seoul National University, <sup>2</sup>Department of Materials Science and Engineering, University of Pennsylvania, <sup>3</sup>Department of Materials Engineering, Hanyang University
- WK4-K-3 17:45-18:00 Metal-Insulator-Transition in Nano Scale SmNiO<sub>3</sub> for Selector Application with BEOL Compatibility**  
저자: Saiful Haque Misha, Nusrat Tamanna, Euijun Cha, Daeseok Lee, Amit Prakash, Jiyong Woo, Jeonghwan Song, and Hyunsang Hwang  
소속: Department of Materials Science and Engineering, Pohang University of Science and Technology
- WK4-K-4 18:00-18:15 Modeling of Crystalline Morphology in Mixed-Phase Ge<sub>2</sub>Sb<sub>2</sub>Te<sub>5</sub> from Electrical Characterization**  
저자: Sanghyeon Lee, Gwihyun Kim, Seungwoo Hong, and Seung Jae Baik  
소속: Department of Electrical, Electronic and Control Engineering, Hankyong National University
- WK4-K-5 18:15-18:30 A 1.2-V 2T Embedded DRAM Macro in Generic Logic CMOS Technology**  
저자: Weijie Cheng, Baolong Zhou, Huarong Zheng, and Yeonbae Chung  
소속: School of Electronics Engineering, Kyungpook National University