## K. Memory (Design & Process Technology) 분과

2017년 2월 15일 (수), 15:25-17:10 Room B (토파즈, 2층)

## [WB4-K] Understanding Resistance Switching Phenomena

좌장: 백인규(삼성전자), 권용우(홍익대학교)

WB4-K-1 15:25-15:40	Anomalous Quantum Conductance in Ta <sub>2</sub> O <sub>5</sub> and HfO <sub>2</sub> Resistance Switching
	Memory Tae Hyung Park <sup>1</sup> , Hae Jin Kim <sup>1</sup> , Soo Gil Kim <sup>2</sup> , Byung Joon Choi <sup>3</sup> , and Cheol Seong Hwang <sup>1</sup> <sup>1</sup> Department of Materials Science and Engineering and Inter-University Semiconductor Research Center, Seoul National University, <sup>2</sup> SK Hynix Inc., <sup>3</sup> Department of Materials Science and Engineering, Seoul National University of Science and Technology
WB4-K-2 15:40-16:10	[초청] Analog Resistive Switching Devices for Artificial Synapse in Neuromorphic Systems
	Hyung Jun Kim, Hong Zheng, Paul Yang, and Tae-Sik Yoon Department of Materials Science and Engineering, Myongji University
WB4-K-3 16:10-16:25	A Study of the Transition between the Non-Polar and Bipolar Resistance Switching Mechanisms in the TiN/TiO <sub>2</sub> /Al Memory
	Xing Long Shao <sup>1</sup> , Kyung Min Kim <sup>2</sup> , Kyung Jean Yoon <sup>1</sup> , Seul Ji Song <sup>1</sup> , Jung Ho Yoon <sup>1</sup> , Hae Jin Kim <sup>1</sup> , Tae Hyung Park <sup>1</sup> , Dae Eun Kwon <sup>1</sup> , Young Jae Kwon <sup>1</sup> , Yu Min Kim <sup>1</sup> , Nuo Xu <sup>1</sup> , Xi Wen Hu <sup>3</sup> , Jin Shi Zhao <sup>3</sup> , and Cheol Seong Hwang <sup>1</sup> <sup>1</sup> Department of Materials Science and Engineering and Inter-University Semiconductor Research Center, Seoul National University, <sup>2</sup> Hewlett-Packard Laboratories, Hewlett- Packard Company, <sup>3</sup> School of Electronics Information Engineering, Tianjin Key Laboratory
WB4-K-4 16:25-16:40	Understanding of Relaxation Characteristic in Filament-type ReRAM
	박용택, 이재연, 하태정, 박우영, 김경완, 김수길 SK Hynix R&D 부문
WB4-K-5 16:40-16:55	A Study on Switching Fail Mechanism of Ta/HfO2 for ReRAM
	Woo Young Park <sup>1</sup> , Tae Jung Ha <sup>1</sup> , Jae Yeon Lee <sup>1</sup> , Yong Taek Park <sup>1</sup> , Su Hyun Lee <sup>1</sup> , Tae One Youn <sup>2</sup> , Min Ki Choi <sup>2</sup> , Soo Gil Kim <sup>1</sup> , and Hyeong Soo Kim <sup>1</sup> <sup>1</sup> Advanced Cell Research Team, R&D Division, SK Hynix Semiconductor Inc., <sup>2</sup> AT Team, R&D Division, SK Hynix Semiconductor Inc.
WB4-K-6 16:55-17:10	Filament Growth Controlled Memristive Switching Memory Device via Nanocone Patterning
	Byoung Kuk You, Tae Jin Kim, Jong Min Kim, Daniel J. Joe, and Keon Jae Lee Department of Material Science and Engineering, KAIST