



## Future Normal in Semiconductor

2025년 2월 14일(금), 09:00-10:45

Room A(그랜드볼룸 I), 4층

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

### 041\_[FA1-K] Security Applications and Reliability of Emerging Memory

좌장: 김형진 교수(한양대학교), 김경민 교수(KAIST)

<p>FA1-K-1 09:00-09:15</p>	<p><b>Designing Memristive Baffle Systems via Material and Simulation Co-Design and Their Implementation for Enhancing Synaptic Linearity Characteristics</b></p> <p>Eun Young Kim, Juseong Park, Sumin Ju, Woojoon Park, Woon Hyung Cheong, Myeongchan Ko, and Kyung Min Kim KAIST</p>
<p>FA1-K-2 09:15-09:30</p>	<p><b>Leakage Current Estimation of CVD-grown MoS<sub>2</sub> Based 2T0C DRAM and Retention Limitation by Read Transistor Degradation</b></p> <p>Changjun Lee<sup>1,3</sup>, Jisoo Seok<sup>2</sup>, and Jiwon Chang<sup>1,2,3</sup></p> <p><sup>1</sup>Department of System Semiconductor Engineering, Yonsei University, <sup>2</sup>Department of Materials Science and Engineering, Yonsei University, <sup>3</sup>BK21 Graduate Program in Intelligent Semiconductor Technology</p>
<p>FA1-K-3 09:30-09:45</p>	<p><b>In-Series Phase-Change Memory Pair for Enhanced Data Retention and Large Window in Automotive Application</b></p> <p>Sejeung Choi<sup>1</sup> and Sangbum Kim<sup>1,2,3</sup></p> <p><sup>1</sup>Department of Materials Science and Engineering, College of Engineering, Seoul National University, <sup>2</sup>Research Institute of Advanced Materials, Seoul National University, <sup>3</sup>Inter-university Semiconductor Research Center, Seoul National University</p>
<p>FA1-K-4 09:45-10:00</p>	<p><b>True Random Number Generator using Random Telegraph Noise Signal of Memristor with Tolerance</b></p> <p>Dayeon Yu and Hyungjin Kim Division of Materials Science and Engineering and Department of Semiconductor Engineering, Hanyang University</p>
<p>FA1-K-5 10:00-10:15</p>	<p><b>Heterogeneous Data Clustering and Outlier Detection with Multifunctional Memristive Array</b></p> <p>Dong Hoon Shin, Sunwoo Cheong, Néstor Ghenzi, and Cheol Seong Hwang Department of Materials Science and Engineering and Inter-University Semiconductor Research Center, Seoul National University</p>



# 제 32회 한국반도체학술대회

The 32nd Korean Conference on Semiconductors

2025년 2월 12일(수)-14일(금) | 강원도 하이원리조트

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<p>FA1-K-6 10:15-10:30</p>	<p><b>True Random Number Generator using Memcapacitor based on Flash Cell</b> Hwiho Hwang, Sangwook Youn, and Hyungjin Kim Division of Materials Science and Engineering and Department of Semiconductor Engineering, Hanyang University</p>
<p>FA1-K-7 10:30-10:45</p>	<p><b>Enhanced Cryogenic Stability and Endurance of CMOS-Compatible HfZrO<sub>2</sub> FeCAPs with Optimized WO Buffer layer</b> Eunjin Kim and Jiyong Woo School of Electronic and Electrical Engineering, Kyungpook National University</p>