



# 제 30회 한국반도체학술대회

The 30th Korean Conference on Semiconductors

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

2023년 2월 15일(수), 10:45-12:30

Room G (스페이드 II+III, 6층)

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

### [WG2-K] Processing In Memory

좌장: 정두석 교수(한양대학교), 김윤 교수(서울시립대학교)

<p><b>WG2-K-1</b> 10:45-11:15 [초청]</p>	<p><b>Memory-Based Hardware Neural System for High-density and Low-power Applications</b> Min-Hwi Kim <i>Chung-Ang University</i></p>
<p><b>WG2-K-2</b> 11:15-11:30</p>	<p><b>저전력 추론을 위한 용량성 커플링 기반의 뉴로모픽 아키텍처</b> Jung Nam Kim<sup>1</sup>, Minsuk Koo<sup>2</sup>, and Yoon Kim<sup>1</sup> <sup>1</sup><i>Department of Electrical and Computer Engineering, University of Seoul,</i> <sup>2</sup><i>Department of Computer Science and Engineering, Incheon National University</i></p>
<p><b>WG2-K-3</b> 11:30-11:45</p>	<p><b>Stochastic Stateful Logic Technology and Its Application to Evolutionary Learning Algorithm in TaO<sub>x</sub>-Memristor Crossbar</b> Do Hoon Kim and Kyung Min Kim <i>KAIST</i></p>
<p><b>WG2-K-4</b> 11:45-12:00</p>	<p><b>A 256×64 12T SRAM Compute-In-Memory Macro with In-SRAM Reference Voltage Generation</b> Hyeyeong Lee, Kyeongho Lee, Yeseul Kim, and Jongsun Park <i>Department of Electrical Engineering, Korea University</i></p>
<p><b>WG2-K-5</b> 12:00-12:15</p>	<p><b>Probabilistic Computing Hardware based on a Diffusive Memristor</b> Jaehyun Kim<sup>1,2</sup>, Janguk Han<sup>1,2</sup>, Kyung Seok Woo<sup>1,2</sup>, and Cheol Seong Hwang<sup>1,2</sup> <sup>1</sup><i>Department of Materials Science and Engineering, Seoul National University,</i> <sup>2</sup><i>Inter-university Semiconductor Research Center, Seoul National University</i></p>
<p><b>WG2-K-6</b> 12:15-12:30</p>	<p><b>Implementation of the 2T-2M Block-Based Reconfigurable Logic Circuit by Combining the Amorphous InGaZnO ReRAM and Thin-film Transistors</b> Jung Rae Cho, Jingyu Park, Tae Jun Yang, Jong-Ho Bae, Sung-Jin Choi, Dong Myong Kim, and Dae Hwan Kim <i>School of Electrical Engineering, Kookmin University</i></p>