



## Future Normal in Semiconductor

2025년 2월 13일(목), 10:55-12:40

Room J(스페이스 II+III), 6층

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

#### 022\_[TJ2-K] Neuromorphic Application

좌장: 정연주 박사(KIST), 곽준영 교수(이화여대)

<p>초청 TJ2-K-1 10:55-11:25</p>	<p><b>Opportunities and Challenges for Analog Computation in Memory in the AI Era</b> 박상수, 최혜정, 김수길, 이재연, 차선용 RnD division, SK hynix Inc.</p>
<p>TJ2-K-2 11:25-11:40</p>	<p><b>Development of the Neural Network SPICE Integration Platform (NSIP) Using FeFET-Based Crossbar Arrays</b> Huijun Kim<sup>1</sup>, Juhwan Park<sup>2</sup>, Changho Ra<sup>2</sup>, and Jongwook Jeon<sup>2</sup> <sup>1</sup>Department of Semiconductor Convergence Engineering, Sungkyunkwan University, <sup>2</sup>Department of Electrical and Computer Engineering, Sungkyunkwan University</p>
<p>TJ2-K-3 11:40-11:55</p>	<p><b>Novel Data-Driven Compact Modeling for RRAM Using Deep Neural Networks</b> Ye Sle Cha<sup>1</sup>, Premkumar Vincent<sup>1</sup>, Juhwan Park<sup>2</sup>, Hyunseok Whang<sup>1</sup>, Jongwook Jeon<sup>2</sup>, and Hyunbo Cho<sup>1</sup> <sup>1</sup>Research &amp; Development Center, Alsemy Inc., <sup>2</sup>Sungkyunkwan University</p>
<p>TJ2-K-4 11:55-12:10</p>	<p><b>Solving Max-Cut Problem Using Spiking Boltzmann Machine Based on Neuromorphic Hardware with Phase Change Memory</b> Yu Gyeong Kang, Jaeweon Park, and Sangbum Kim Seoul National University</p>
<p>TJ2-K-5 12:10-12:25</p>	<p><b>IGZO and Pt-based Floating Gate Memory for Synaptic Device with Implementing Various Voltage Schemes</b> Heerak Wi<sup>1</sup>, Eunpyo Park<sup>2</sup>, Ria Choi<sup>1</sup>, Dae Kyu Lee<sup>2</sup>, Min Jee Kim<sup>1</sup>, and Joon Young Kwak<sup>1</sup> <sup>1</sup>Ewha Womans University, <sup>2</sup>KIST</p>
<p>TJ2-K-6 12:25-12:40</p>	<p><b>Reconfigurable Neuromorphic Device by 2D Semiconductor-Metal Interfacial Engineering for AI Hardware</b> Hyunho Seok<sup>1</sup>, Sihoon Son<sup>1</sup>, Dongyoung Lee<sup>1</sup>, Hyunbin Choi<sup>1</sup>, Jinyoung Lee<sup>1</sup>, Seyong Oh<sup>2</sup>, Jin-Hong Park<sup>1</sup>, and Taesung Kim<sup>1</sup> <sup>1</sup>Sungkyunkwan University, <sup>2</sup>Hanyang University</p>