



# 제 31회 한국반도체학술대회

The 31st Korean Conference on Semiconductors

2024년 1월 24일(수)-26일(금) | 경주화백컨벤션센터(HICO)

2024년 1월 26일(금), 15:40-17:25

Room H(202), 2층

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

### [FH3-K] Ferroelectric Memory II

좌장: 김상범 교수(서울대학교), 배종호 교수(국민대학교)

<p>FH3-K-1 15:40-15:55</p>	<p>High-Performance and Disturb-Free Charge Trap Flash with Capacitance Boosting by Negative Capacitance Giuk Kim, Taeho Kim, Sangho Lee, Hunbeom Shin, Lingwei Zhang, Hyojun Choi, Yunseok Nam, Sangmok Lee, Woongjin Kim, Jihye Ock, Sujeong Lee, Hyunjun Kang, and Sanghun Jeon School of Electrical Engineering, KAIST</p>
<p>FH3-K-2 15:55-16:10</p>	<p>Energy Efficient Computing In Memory with Metal-Ferroelectric-Metal-Insulator-Silicon (MFMIS) Ferroelectric FET Giuk Kim, Sangho Lee, Hunbeom Shin, Lingwei Zhang, Hyojun Choi, Yunseok Nam, Sangmok Lee, Woongjin Kim, Jihye Ock, Sujeong Lee, Hyunjun Kang, and Sanghun Jeon School of Electrical Engineering, KAIST</p>
<p>FH3-K-3 16:10-16:25</p>	<p>Comparative Analysis of Polarization Switching Characteristics in Channel and Contact Regions of Ferroelectric InGaZnOx Thin Film Transistor Sejun Park, Hyojin Yang, Haesung Kim, Sanghyuk Yun, Ha Neul Lee, Dong Myong Kim, Dae Hwan Kim, Sung-Jin Choi, and Jong-Ho Bae School of Electrical Engineering, Kookmin University</p>
<p>FH3-K-4 16:25-16:40</p>	<p>A Strategy for Controlling Imprint Field in Hafnia Ferroelectric Device Hunbeom Shin, Junghyeon Hwang, Giuk Kim, Sangho Lee, Lingwei Zhang, Hyojun Choi, Sujeong Lee, and Sanghun Jeon School of Electrical Engineering, KAIST</p>
<p>FH3-K-5 16:40-16:55</p>	<p>Long-lifespan HfZrO<sub>4</sub> Random-access Memory with Degradation Suppressing Layer Do Yeon Lee, Woon San Ko, Jun Ho Byun, So Yeon Kwon, and Ga Won Lee Chungnam National University</p>
<p>FH3-K-6 16:55-17:10</p>	<p>Termination Topologies of the Split Signal Lines for High-speed V-NAND Package Test Ungjin Jang, Jahwan Ku, Hyucksoo Jeon, and Sehyun Seo Samsung Electronics Co., Ltd.</p>



# 제 31회 한국반도체학술대회

The 31st Korean Conference on Semiconductors

2024년 1월 24일(수)-26일(금) | 경주화백컨벤션센터(HICO)

FH3-K-7

17:00-17:25

Voltage Summation-Based Processing-In Memory SRAM Macro with  
4-Bit Weight and 4-Bit Input Using Input-Bit Slicing Method

Jung Nam Kim<sup>1</sup>, Yong Woo Kim<sup>1</sup>, Minsuk Koo<sup>2</sup>, and Yoon Kim<sup>1</sup>

<sup>1</sup>Department of Electrical and Computer Engineering, University of Seoul,

<sup>2</sup>Department of Computer Science and Engineering, Incheon National University