



제 30회 한국반도체학술대회

The 30th Korean Conference on Semiconductors

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

2023년 2월 14일(화), 09:00-10:45

Room G (스페이드 II+III, 6층)

K. Memory (Design & Process Technology) 분과

[TG1-K] RRAM and Synapse Device I

좌장: 김상범 교수(서울대학교), 정성엽 박사(차세대융합기술연구원)

<p>TG1-K-1 09:00-09:15</p>	<p>Trade-off of Synaptic Characteristics depending on Reservoir Layer in Oxygen Based ECRAM Hyejin Kim, Jongseon Seo, Seojin Cho, Hyeonseok Sin, Sungyun Choi, and Daeseok Lee <i>Department of Electronic Materials Engineering, Kwangwoon University</i></p>
<p>TG1-K-2 09:15-09:30</p>	<p>Hardware Convolutional Kernels with Reliable PrCaMnO_x-Based RRAM Array for Neuromorphic Image Processing Eunryeong Hong¹, Seonuk Jeon², Heebum Kang¹, Hyun Wook Kim¹, Nayeon Kim², Kibong Moon³, and Jiyong Woo^{1,2} ¹<i>School of Electronic and Electrical Engineering, Kyungpook National University,</i> ²<i>School of Electronics Engineering, Kyungpook National University,</i> ³<i>Department of Materials Science and Engineering, POSTECH</i></p>
<p>TG1-K-3 09:30-09:45</p>	<p>Simulation of Synaptic Characteristics of Memristor based on Interfacial Switching Mechanism Sagar Khot, Dongmyung Jung, and Yongwoo Kwon <i>Department of Materials Science and Engineering, Hongik University</i></p>
<p>TG1-K-4 09:45-10:00</p>	<p>균일한 두께의 그래핀 옥사이드 저항변화층을 가지는 RRAM 기반 시냅스 소자 Hyun-Seok Choi¹, Suck Won Hong², and Yoon Kim¹ ¹<i>Department of Electrical and Computer Engineering, University of Seoul,</i> ²<i>Department of Cogno-Mechatronics Engineering, Pusan National University</i></p>
<p>TG1-K-5 10:00-10:15</p>	<p>Transparent and Flexible Memristor with Stable Memory Characteristics by Utilizing Cul Deposition based on Low Temperature Solution Yongin Cho, Arindam Bala, and Sunkook Kim <i>School of Advanced Materials Science and Engineering, Sungkyunkwan University</i></p>
<p>TG1-K-6 10:15-10:30</p>	<p>Fully Parallel, Highly Linear Synaptic Weight Update Enabled by Ion-limited CuO_x/HfO_x/WO_x ECRAM Synapse for Neuromorphic Systems Heebum Kang¹, Hyun Wook Kim¹, Eunryeong Hong¹, Nayeon Kim², Seonuk Jeon², and Jiyong Woo^{1,2} ¹<i>School of Electronic and Electrical Engineering, Kyungpook National University,</i> ²<i>School of Electronics Engineering, Kyungpook National University</i></p>
<p>TG1-K-7 10:30-10:45</p>	<p>Implementation of Motion Detection by Highly Uniform Dynamic Memristor Min Gu Lee, Hanchan Song, Gwangmin Kim, and Kyung Min Kim <i>Department of Materials Science and Engineering, KAIST</i></p>