



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)

TG1-K-1 09:00-09:15	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>
TG1-K-2 09:15-09:30	Hardware Convolutional Kernels with Reliable PrCaMnO_x-Based RRAM Array for Neuromorphic Image Processing Eunryeong Hong ¹ , Seonuk Jeon ² , Heebum Kang ¹ , Hyun Wook Kim ¹ , Nayeon Kim ² , Kibong Moon ³ , 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>
TG1-K-3 09:30-09:45	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>
TG1-K-4 09:45-10:00	균일한 두께의 그래핀 옥사이드 저항변화층을 가지는 RRAM 기반 시냅스 소자 Hyun-Seok Choi ¹ , Suck Won Hong ² , and Yoon Kim ¹ ¹ <i>Department of Electrical and Computer Engineering, University of Seoul,</i> ² <i>Department of Cogno-Mechatronics Engineering, Pusan National University</i>
TG1-K-5 10:00-10:15	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>
TG1-K-6 10:15-10:30	Fully Parallel, Highly Linear Synaptic Weight Update Enabled by Ion-limited CuO_x/HfO_x/WO_x ECRAM Synapse for Neuromorphic Systems Heebum Kang ¹ , Hyun Wook Kim ¹ , Eunryeong Hong ¹ , Nayeon Kim ² , Seonuk Jeon ² , 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>
TG1-K-7 10:30-10:45	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>