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 F (스페이드 I, 6층)

K. Memory (Design & Process Technology) 분과
[TF1-K] Charge Trap Flash and PRAM

좌장: 권용우 교수(홍익대학교), 김수길 TL(SK 하이닉스)

TF1-K-1 **09:00-09:15**	**Analysis of Heavy Ion Induced Single-Event-Transients in Capacitorless DRAM based on a Polycrystalline Silicon Transistor** Sang Ho Lee, Jin Park, Geon Uk Kim, Ga Eon Kang, Jun Hyeok Heo, So Ra Jeon, and In Man Kang *School of Electronic and Electrical Engineering, Kyungpook National University*
TF1-K-2 **09:15-09:30**	**Application on Logic-in-Memory Circuit Using Floating Gate Field Effect Transistor with Tunneling Barrier** Sueyeon Kim[1], Sangki Cho[1], Insoo Choi[1], Myounggon Kang[2], Seungjae Baik[3], and Jongwook Jeon[1] *[1]Department of Electrical and Electronics Engineering, Konkuk University, [2]Department of Electrical and Electronics Engineering, Korea National University of Transportation, [3]Department of Electrical and Electronics Engineering, Hankyung University*
TF1-K-3 **09:30-09:45**	**Triplet Spike-Timing-Dependent Plasticity with Gate-tunable Three-terminal IGZO-Based FET Using Charge Trapping System** Jae Bum Jeon, Seong-In Cho, Geunyoung Kim, and Kyung Min Kim *KAIST*
TF1-K-4 **09:45-10:00**	**Large Memory Window with High Synaptic Performance of van der Waals Heterostructure Devices based on 2D Layered Ge_4Se_9** Gichang Noh[1,2], Hwayoung Song[2], Heenang Choi[3], Mingyu Kim[2], Saeyoung Oh[4], Dong Yeon Woo[1], Yooyeon Jo[1], Eunpyo Park[1], Min-kyung Jo[2], Eoram Moon[2], Yong-Sung Kim[5], Hu Young Jeong[4], Taek-Mo Chung[3], Kibum Kang[2], and Joon Young Kwak[1,6] *[1]Center for Neuromorphic Engineering, KIST, [2]Department of Materials Science and Engineering, KAIST, [3]Thin Film Materials Research Center, KRICT, [4]Graduate School of Semiconductor Materials and Devices Engineering, UNIST, [5]Low-Dimensional Material Team, KRISS, [6]Division of Science and Technology, University of Science and Technology (UST)*
TF1-K-5 **10:00-10:15**	**Emulation of Synaptic Behavior Using Pentagonal $PdSe_2$-Based Flash Memory** Eunpyo Park[1,2], Jae Eun Seo[3], Gichang Noh[1], Yooyeon Jo[1], In Soo Kim[1], Jongkil Park[1], Jaewook Kim[1], YeonJoo Jeong[1], Suyoun Lee[1], Inho Kim[1], Jong-Keuk Park[1], SangBum Kim[2], Jiwon Chang[3], and Joon Young Kwak[1,4] *[1]KIST, [2]Seoul National University, [3]Yonsei University, [4]University of Science and Technology (UST)*
TF1-K-6 **10:15-10:30**	**3차원 플래쉬 메모리의 이동도 향상을 위한 산화물 반도체 채널 도입** Yun Hee Lee[1], Tae In Lee[1], Eui Joong Shin[1], Seunghyun Oh[1], Sung Haeng Cho[2], Chanjong Ju[3], Jaeduk Lee[3], and Byung Jin Cho[1] *[1]School of Electrical Engineering, KAIST, [2]Oxide Electronics Research Team, ETRI, [3]Flash Product and Technology, Samsung Electronics Co., Ltd.*
TF1-K-7 **10:30-10:45**	**Computational Design of Quantum-bit Memory Devices Using Electrode-driven Silicon Quantum Dot Platform** Hoon Ryu *KISTI*