



# 제 31회 한국반도체학술대회

The 31st Korean Conference on Semiconductors

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

2024년 1월 25일(목), 15:30-17:15

Room K(205), 2층

## G. Device & Process Modeling, Simulation and Reliability 분과

### [TK3-G] TCAD & Multiphysics Simulation

좌장: 이재우 교수(고려대학교), 김현우 교수(건국대학교)

TK3-G-1 15:30-15:45	The Quantum Mechanical Effect of Amorphous InGaZnO Transistors Compared with Silicon-on Insulator Transistors Ho Jung Lee, Donguk Kim, Changwook Kim, Dong Myong Kim, Sung-Jin Choi, Jong-Ho Bae, and Dae Hwan Kim School of Electrical Engineering, Kookmin University
TK3-G-2 15:45-16:00	Investigating Radioactive Ions Effect in The Complementary FET based on The Structure Jonghwa Jeong and Hyunwoo Kim Department of Electrical and Electronics Engineering, Konkuk University
TK3-G-3 16:00-16:15	Mitigation of Single Event Upset Effects in 3 nm Technology Node Gate-All-Around Nanosheet FET 6T SRAM cell Minji Bang, Jonghyeon Ha, Minki Suh, Dabok Lee, Minsang Ryu, and Jungsik Kim Department of Electrical Engineering, Gyeongsang National University
TK3-G-4 16:15-16:30	A Novel CT-DRAM with High Speed and High Retention at Low Power to Replace DRAM Dabok Lee, Jonghyeon Ha, Minki Suh, Minji Bang, Minsang Ryu, and Jungsik Kim Department of Electrical Engineering, Gyeongsang National University
TK3-G-5 16:30-16:45	Investigation of Filamentary Resistive Switching Using Finite Element Method with Phase-field and Multiphysics Simulation Dongmyung Jung and Yongwoo Kwon Department of Materials Science and Engineering, Hongik University
TK3-G-6 16:45-17:00	Computational Investigation on Quantum Information Processing Using Triple Quantum Dot Structures Ji-Hoon Kang and Hoon Ryu KISTI
TK3-G-7 17:00-17:15	Multiphysics Modeling of Thermal Disturbance in Three-Dimensional Stackable Phase-Change Memory Yechan Kim <sup>1</sup> , Namwook Hur <sup>2</sup> , Joonki Suh <sup>2</sup> , and Yongwoo Kwon <sup>1</sup> <sup>1</sup> Hongik University, <sup>2</sup> Ulsan National Institute of Science and Technology