제 31회 한국반도체학술대회
The 31st Korean Conference on Semiconductors

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G. Device & Process Modeling, Simulation and Reliability 분과
[TK2-G] Carrier Transport & Ab-initio Simulation

좌장: 정창욱 교수(울산과학기술원), 장지원 교수(연세대학교)

TK2-G-1 10:55-11:10	Neural Network-Assisted Acceleration of Full-Band Semi-Classical Monte Carlo Carrier Transport Simulation Dong Hyeok Lee[1] and Jiwon Chang[1,2] [1]Department of Materials Science and Engineering, Yonsei University, [2]Department of System Semiconductor Engineering, Yonsei University
TK2-G-2 11:10-11:25	Cation Disorder Limited IGZO Mobility Calculation based on Density Functional Theory Seung Hyo Han, Deokhwa Seo, and Mincheol Shin School of Electrical Engineering, KAIST
TK2-G-3 11:25-11:40	Effects of the Gate Offset on Gate-all-around Negative Capacitance Field Effect Transistors with Self-heating Effect Yangjin Jung, Hyeongu Lee, and Mincheol Shin Department of Electrical Engineering, KAIST
TK2-G-4 11:40-11:55	Semi-Classical Monte Carlo Simulation of Electron/Hole Mobility in Monolayer MX_2 (M=Mo, W; X=S, Se) Sukhyeong Youn[1,2], Donghyeok Lee[1,2], and Jiwon Chang[1,2] [1]Department of System Semiconductor Engineering, Yonsei University, [2]Department of Materials Science & Engineering, Yonsei University
TK2-G-5 11:55-12:10	Study of Non-equilibrium Energetics in Van der Waals Ferroelectric Tunnel Junctions Using Multi-space Density Functional Theory Kaptan Rajput, Ryong Gyu Lee, Tae Hyung Kim, and Yong-Hoon Kim School of Electrical Engineering, KAIST
TK2-G-6 12:10-12:25	Strain-Tuned Ferroelectric Transitions in HfO_2: A New Pathway to Ferroelectric Devices Il Young Lee[1,2] and Jae Jun Yu[1,2] [1]Center for Theoretical Physics, Seoul National University, [2]Department of Physics and Astronomy, Seoul National University

TK2-G-7 12:25-12:40	Transport Simulation for Nanosheet FET with Extended Source and Drain Regions Phil-Hun Ahn and Sung-Min Hong School of Electrical Engineering and Computer Science, GIST