2025년 2월 12일(수)-14일(금) | 강원도 하이원리조트

Future Normal in Semiconductor

2025년 2월 14일(금), 09:00-10:45 Room J(스페이드 II+III), 6층

G. Device & Process Modeling, Simulation and Reliability 분과 O50_[FJ1-G] Compact Modeling

좌장: 김성호 교수(이화여자대학교), 김현우 교수(건국대학교)

FJ1-G-1 09:00-09:15	Vertical Channel IGZO-TFT Model for Neuromorphic Application Hyoungsoo Kim ¹ , Daewoong Kwon ² , and Hyunwoo Kim ¹ ¹ Department of Electrical and Electronics Engineering, Konkuk University, ² Department of Electronic Engineering, Hanyang University
FJ1-G-2 09:15-09:30	Deterministic-Precession MTJ Device Utilizing VCMA Effect Stanislav Sin and Saeroonter Oh Sungkyunkwan University
FJ1-G-3 09:30-09:45	Large Physics Model-Driven SPICE Model Generation of Ultra-Low Power GAA-MOSFET for Efficient DTC0 in Semiconductor Design Premkumar Vincent ¹ , Johyeon Kim ² , Gunhee Choi ² , Yeongwoo Nam ¹ , Kyungmin Kim ¹ , Ye Sle Cha ¹ , Hyunseok Whang ¹ , Donghyun Jin ¹ , Jongwook Jeon ² , and Hyunbo Cho ¹ ¹ Alsemy Inc., ² Sungkyunkwan University
FJ1-G-4 09:45-10:00	Fully Analytical SPICE-Compatible Compact I-V Model and Parameter Extraction Procedure Considering the Density of States and Transport Mechanism in Amorphous InGaZnO Thin-Film Transistors Sae Him Jung, Seung Joo Myoung, Dong Hyeop Shin, Su Han Noh, Donguk Kim, Changwook Kim, Sung-Jin Choi, Jong-Ho Bae, Dong Myong Kim, and Dae Hwan Kim School of Electrical Engineering, Kookmin University
FJ1-G-5 10:00-10:15	Short-Channel Effects Model of Channel-All-Around MOSFETs as Cell Array Transistors for 3-Dimensional DRAM Chae-Young Kim and Ji-Woon Yang Department of Electronics and Information Engineering, Korea University
FJ1-G-6 10:15-10:30	Design of a Python-SPICE Integrated Platform for FeFET-Based VMM Circuit Simulation in Neuromorphic Computing Juhwan Park ¹ , Huijun Kim ² , and Jongwook Jeon ¹ ¹ Department of Electrical and Computer Engineering, Sungkyunkwan University, ² Department of Semiconductor Convergence Engineering, Sungkyunkwan University

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FJ1-G-7 10:30-10:45 Accelerated Device Simulation of CFET Inverter by Using Quasi-1D Model

Kwang-Woon Lee and Sung-Min Hong

School of Electrical Engineering and Computer Science, GIST