

2025년 2월 12일(수)-14일(금) | 강원도 하이원리조트

Future Normal in Semiconductor

2025-02-14(금), 09:00-10:45 좌장: 추후업데이트 예정

G. Device & Process Modeling, Simulation and Reliability 분과

[FJ1-G] Compact Modeling

FJ1-G-1	Vertical Channel IGZO-TFT Model for Neuromorphic Application Hyoungsoo Kim ¹ , Daewoong Kwon ² , and Hyunwoo Kim
09:00-09:15	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
	Large Physics Model-driven SPICE Model Generation of Ultra-Low
FJ1-G-3	Power GAA-MOSFET for Efficient DTCO in Semiconductor Design Premkumar Vincent ¹ , Johyeon Kim ² , Gunhee Choi ² , Yeongwoo Nam ¹ , Kyungmin
09:30-09:45	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
	Fully Analytical SPICE-Compatible Compact I-V Model and Parameter
	Extraction Procedure Considering the Density of States and Transport
FJ1-G-4	Mechanism in Amorphous InGaZnO Thin-Film Transistors
09:45-10:00	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
	Short-Channel Effects Model of Channel-All-Around MOSFETs as Cell
FJ1-G-5	Array Transistors for 3-Dimensional DRAM
10:00-10:15	Chae-Young Kim and Ji-Woon Yang
10.00 10.10	Department of Electronics and Information Engineering, Korea University
	Design of a Python-SPICE Integrated Platform for FeFET-Based VMM
FJ1-G-6	Circuit Simulation in Neuromorphic Computing
10:15-10:30	Juhwan Park ¹ , Jongwook Jeon ¹ ,and Huijun Kim ²
	¹ Department of Electrical and Computer Engineering, Sungkyunkwan University,



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	² Department of Semiconductor Convergence Engineering, Sungkyunkwan University
	Accelerated Device Simulation of CFET Inverter by Using Quasi-1D
FJ1-G-7	Model
10:30-10:45	Kwang-Woon Lee and Sung-Min Hong
	School of Electrical Engineering and Computer Science, GIST