

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

Room G

하나스퀘어 (B112)

일 시 : 2월 17일(금) 11:20-12:35

세션명 : [FG2-G] Modeling and Simulation II

좌 장 : 황성보(매그나칩반도체), 이정수(포항공과대학교)

- 
- FG2-G-1 11:20-11:50 **[Invited]** Full Quantum-mechanical Calculation of Gate Leakage Current in Nano-scale MOSFETs  
저자: Mincheol Shin, Kihoon Park, and Jung Hyun Oh  
소속: Department of Electrical Engineering, KAIST
- FG2-G-2 11:50-12:05 Estimation of Initial Surface Potential and Modeling of Inversion Charge for Double-Gate MOSFET  
저자: 황병운<sup>1</sup>, 이창용<sup>2</sup>, 이석희<sup>1</sup>, 양지운<sup>2</sup>  
소속: <sup>1</sup>Department of Electrical Engineering, KAIST, <sup>2</sup>Department of Electronics and Information Engineering, Korea University
- FG2-G-3 12:05-12:20 Non-equilibrium Green's Function Approach to Surface-roughness-limited Mobility in Silicon Nanowire Field Effect Transistors  
저자: Hyo-Eun Jung and Mincheol Shin  
소속: Department of Electrical Engineering, KAIST
- FG2-G-4 12:20-12:35 Study of Hole-mobility Behaviors in Ultra-scaled Silicon Nanowire Field Effect Transistors: Multi-band Monte Carlo Approach  
저자: Hoon Ryu<sup>1</sup>, Ju-Young Jung<sup>2</sup>, and Mincheol Shin<sup>2</sup>  
소속: <sup>1</sup>Supercomputing Center, Korea Institute of Science and Technology Information, <sup>2</sup>Department of Electrical Engineering, KAIST