

# 제23회 한국반도체학술대회

2016년 2월 22일(월)-24일(수), 강원도 하이원리조트

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

Room D

합백Ⅱ+Ⅲ(5층)

2016년 2월 23일(화) 15:10-17:10

[TD3-G] Device Modeling and Simulation 1 : RF, Terahertz, Low-Power, and Novel Devices

좌장 : 유현용(고려대학교), 조인욱(SK 하이닉스)

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| TD3-G-1 | 15:10-15:25 | <b>Tunnel FET-based Negative Differential Resistance Device with Triple-peaks and Ultra-high Peak-to-valley Current Ratio</b><br>Jaewon Jeong, Sunhae Shin, Esan Jang, and Kyung Rok Kim<br><i>School of Electrical and Computer Engineering, Ulsan National Institute of Science and Technology</i> |
| TD3-G-2 | 15:25-15:40 | <b>Output Equivalent Circuit Modeling for HR PD-SOI RF MOSFETs</b><br>Seoyoung Hong and Seonghearn Lee<br><i>Department of Electronic Engineering, Hankuk University of Foreign Studies</i>  |
| TD3-G-3 | 15:40-15:55 | <b>New Non-Quasi-Static (NQS) Compact Model for MOSFET-Based Plasmonic Terahertz Wave Detector</b><br>Kwan Sung Kim, Sang Hyo Ahn, Min Woo Ryu, and Kyung Rok Kim<br><i>School of Electrical and Computer Engineering, Ulsan National Institute of Science and Technology</i>                        |
| TD3-G-4 | 15:55-16:10 | <b>Analysis of Gate Finger Number Dependence of Input Capacitance for RF Multi-Finger MOSFETs</b><br>Ja-Hyun Ahn and Seonghearn Lee<br><i>Department of Electronic Engineering, Hankuk University of Foreign Studies</i>   |
| TD3-G-5 | 16:10-16:25 | <b>Mapping of Gate-all-around MOSFETs to Double-gate MOSFETs</b><br>Jungsung Park and Sung-Min Hong<br><i>School of Information and Communications, Gwangju Institute of Science and Technology</i>  |
| TD3-G-6 | 16:25-16:40 | <b>Novel Dual Channel SiGe/Strain-Silicon FinHEMT for High-Performance and Low-Power Application</b><br>Sung-Ho Kim, Jong Yul Park, Yu-Jung Jung, and Kyung Rok Kim<br><i>School of Electrical and Computer Engineering, Ulsan National Institute of Science and Technology</i>                      |
| TD3-G-7 | 16:40-16:55 | <b>계면 트랩 변동 효과를 고려한 5 nm 노드 나노와이어 핏의 채널 지름에 따른 분석</b><br>고결, 손도균, 신형철<br><i>Inter university Semiconductor Research Center (ISRC) and School of Electrical Engineering and Computer Science, Seoul National University</i>   |

The 23<sup>rd</sup> Korean Conference on Semiconductors (KCS 2016)

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- TD3-G-8      16:55-17:10      Transfer Characteristics of Vacuum Field Emission Transistors with Various Tip Positions of Emitter and Collector**  
Jungsik Kim<sup>1</sup>, Jiwon Kim<sup>2</sup>, Hyeongwan Oh<sup>2</sup>, Jin-Woo Han<sup>3</sup>, M. Meyyappan<sup>3</sup>, and Jeong-Soo Lee<sup>2</sup>  
*<sup>1</sup>Division of IT Convergence Engineering, Pohang University of Science and Technology, <sup>2</sup>Department of Electrical Engineering, Pohang University of Science and Technology, <sup>3</sup>Center for Nanotechnology, NASA Ames Research Center, USA*