



# 제25회 한국반도체학술대회

The 25<sup>th</sup> Korean Conference on Semiconductors

2018년 2월 5일(월)-7일(수), 강원도 하이원리조트 컨벤션 호텔

2018년 2월 7일(수), 10:45-12:15

Room F (봉래, 6층)

## F. Silicon and Group-IV Devices and Integration Technology 분과

### [WF2-F] Reliability

좌장: 김경록 교수(UNIST), 신창환 교수(서울시립대학교)

WF2-F-1 10:45-11:00	<b>Investigation of PBTI Characteristics of FD-SOI TFET with High-k Dielectric</b> Hyeong-Sub Song <sup>1</sup> , So-Yeong Kim <sup>1</sup> , Sung-Kyu Kwon <sup>1</sup> , Dong-Hwan Lim <sup>2</sup> , Chang-Hwan Choi <sup>2</sup> , Ga-Won Lee <sup>1</sup> , and Hi-Deok Lee <sup>1</sup> <i><sup>1</sup>Department of Electronics Engineering, Chungnam National University, <sup>2</sup>Division of Materials Science and Engineering, Hanyang University</i>
WF2-F-2 11:00-11:15	<b>Investigation on Negative Differential Transconductance (NDT) of Double-Gate Tunnel FETs</b> Jang Woo Lee and Woo Young Choi <i>Department of Electronic Engineering, Sogang University</i>
WF2-F-3 11:15-11:30	<b>Gate Voltage Dependence of Low Frequency Noise in Tunneling Field Effect Transistor</b> So-Yeong Kim <sup>1</sup> , Hyeong-Sub Song <sup>1</sup> , Sung-Kyu Kwon <sup>1</sup> , Dong-Hwan Lim <sup>2</sup> , Chang-Hwan Choi <sup>2</sup> , Ga-Won Lee <sup>1</sup> , and Hi-Deok Lee <sup>1</sup> <i><sup>1</sup>Department of Electronics Engineering, Chungnam National University, <sup>2</sup>Division of Materials Science and Engineering, Hanyang University</i>
WF2-F-4 11:30-11:45	<b>Ge 기반의 소자에서 Y-ZrO<sub>2</sub> 게이트 유전체를 이용한 EOT 스케일링 (~5.7Å) 및 누설 전류와 계면 트랩의 감소</b> Tae In Lee, Min Ju Kim, Manh-Cuong Nguyen, Hyun Jun Ahn, Jungmin Moon, Tae Yoon Lee, Hyun-Young Yu, Rino Choi, Wan Sik Hwang, and Byung Jin Cho <i>School of Electrical Engineering, KAIST</i>
WF2-F-5 11:45-12:00	<b>Simple and Scalable N-Type Conversion of Semiconducting Carbon Nanotube Thin Film Transistors Using X-Layer/SU8 Passivation</b> Seung Yeop Kim, Geon Woong Lim, Eun Bin Roh, Geun Woo Baek, and Sung Hun Jin <i>Department of Electronic Engineering, Incheon National University</i>
WF2-F-6 12:00-12:15	<b>Fabrication of High Quality Gate Insulator in Metal-Oxide-Semiconductor Capacitor Using Laser Annealing</b> Kyoung Moon Yu, Hyung Min Ji, Manh-Cuong Nguyen, An Hoang-Thuy Nguyen, Jung Yeon Kim, Sujin Choi, Jonggyu Cheon, Jin Hyun Kim, Sang Woo Kim, Seong Yong Cho, and Rino Choi <i>Department of Materials Science and Engineering, Inha University</i>