



# 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), 09:00-10:30

Room F (봉래, 6층)

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

### [WF1-F] Steep-Slope I : Tunnel-FET

좌장: 김경록 교수(UNIST), 김상완 교수(아주대학교)

WF1-F-1 09:00-09:15	<b>Tunneling Field Effect Transistors with FIN-typed Channel Structure and Their Electrical Characteristics</b> Donghwan Lim, Hoon Hee Han, and Changhwan Choi <i>Division of Materials Science and Engineering, Hanyang University</i>
WF1-F-2 09:15-09:30	<b>Double-Gate Isosceles Trapezoid Tunnel Field-Effect Transistor (DGIT-TFET) to Suppress Ambipolar Current</b> Hwa Young Gu and Sangwan Kim <i>Department of Electrical and Computer Engineering, Ajou University</i>
WF1-F-3 09:30-09:45	<b>Segmented-Channel Tunnel Field Effect Transistor for Bi-Directional Current Flow</b> Jaesoo Park, Sungjin Lee, and Changhwan Shin <i>Department of Electrical and Computer Engineering, University of Seoul</i>
WF1-F-4 09:45-10:00	<b>Drive Current Boosting Method of Tunnel FET with Locally Concentrated Silicon-Germanium Channel near Surface</b> Junil Lee <sup>1</sup> , Ryoongbin Lee <sup>1</sup> , Euyhwan park <sup>1</sup> , Sihyun Kim <sup>1</sup> , Hyun-Min Kim <sup>1</sup> , Kitae Lee <sup>1</sup> , Soyoun Kim <sup>1</sup> , Sangwan Kim <sup>2</sup> , and Byung-Gook Park <sup>1</sup> <i><sup>1</sup>Department of Electrical and Computer Engineering and ISRC, Seoul National University, <sup>2</sup>Department of Electrical and Computer Engineering, Ajou University</i>
WF1-F-5 10:00-10:15	<b>Tunneling Field-Effect Transistor Having SiGe Source Junction and Its Small-Signal Equivalent Circuit Verification through Y-Parameter Analysis</b> Yung Hun Jung <sup>1</sup> , In Man Kang <sup>2</sup> , Wookyung Sun <sup>3</sup> , Hyungsoon Shin <sup>3</sup> , and Seongjae Cho <sup>1</sup> <i><sup>1</sup>Department of Electronics Engineering, Gachon University, <sup>2</sup>School of Electronics Engineering, Kyungpook National University, <sup>3</sup>Department of Electronic and Electrical Engineering, Ewha Woman's University</i>
WF1-F-6 10:15-10:30	<b>Nanowire Tunnel Field-Effect Transistor (TFET) with Ultra-Thin-Tunnel Region for High Current Drivability and Low Subthreshold Swing</b> Seong-Hyun Lee, Jeong-Uk Park, and Sangwan Kim <i>Department of Electrical and Computer Engineering, Ajou University</i>