



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

2021년 1월 28일(목), 14:45-16:15 / 채널 B

[TB4-F] NCFET/TFET Technology

좌장: 김경록 교수 (UNIST), 김장현 교수 (부경대학교)

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| <p>TB4-F-1 14:45-15:00</p> | <p>Suppression of Reverse Drain Induced Barrier Lowering in Negative Capacitance Field-effect Transistor Using Hetero-dielectric Structure</p> <p>Dong-Oh Kim^{1,2}, Kitae Lee^{1,2}, Changha Kim^{1,2}, Sihyun Kim^{1,2}, Hyun-Min Kim^{1,2}, Daewoong Kwon³, and Byung-Gook Park^{1,2}</p> <p>¹Inter-University Semiconductor Research Center (ISRC), Seoul National University, ²Department of Electrical and Computer Engineering, Seoul National University, ³Department of Electrical Engineering, Inha University</p> |
| <p>TB4-F-2 15:00-15:15</p> | <p>Investigation on Negative Differential Resistance (NDR) of Negative Capacitance Tunnel Field-effect Transistor (NC-TFET)</p> <p>Shinhee Kim and Sangwan Kim <i>Department of Electrical and Computer Engineering, Ajou University</i></p> |
| <p>TB4-F-3 15:15-15:30</p> | <p>Optimization of Sidewall Spacer to Enhance Negative Capacitance Field-effect Transistor (NCFET) Electrical Characteristics</p> <p>Jae Yeon Park and Sangwan Kim <i>Department of Electrical and Computer Engineering, Ajou University</i></p> |
| <p>TB4-F-4 15:30-15:45</p> | <p>Impact of Spacer Materials and Gate Underlap on Double Gate Negative Capacitance Tunnel Field-effect Transistor (DGNC-TFET)</p> <p>Seungwon Go and Sangwan Kim <i>Department of Electrical and Computer Engineering, Ajou University</i></p> |
| <p>TB4-F-5 15:45-16:00</p> | <p>Design and Characterization of Complementary Tunneling Field-Effect Transistors Integrated in a Single Device</p> <p>Md. Hasan Raza Ansari, Daehwan Kim, and Seongjae Cho <i>Department of Electronic Engineering, Gachon University</i></p> |
| <p>TB4-F-6 16:00-16:15</p> | <p>Compact Model of Metal-Ferroelectric-Insulator-Semiconductor (MFIS) Negative Capacitance FETs</p> <p>Ha Rim Jeon¹, Yoon-Suk Kim², Uihui Kwon², and Woo Young Choi¹</p> <p>¹Department of Electronic Engineering, Sogang University, ²Device Solution Business, Samsung Electronics Co., Ltd.</p> |

1월 28일 (목)