



제 30회 한국반도체학술대회

The 30th Korean Conference on Semiconductors

2023년 2월 13일(월) ~ 15일(수) | 강원도 하이원리조트(그랜드호텔 컨벤션타워)

2023년 2월 15일(수), 16:00-17:45

Room D (사파이어 II+III, 5층)

D. Thin Film Process Technology 분과

[WD3-D] Emerging Devices

좌장: 윤성민 교수(경희대학교), 엄태용 선임연구원(한국화학연구원)

WD3-D-1 16:00-16:15	In-situ Observation of Two-Dimensional Electron Gas Creation at the Interface of an Atomic-Layer-Deposited $\text{Al}_2\text{O}_3/\text{TiO}_2$ Thin Film Heterostructure Ji Hyeon Choi ¹ , Tae Jun Seok ¹ , Jae Hyuck Jang ² , Deok-Yong Cho ³ , Sang Woon Lee ^{4,5} , and Tae Joo Park ¹ ¹ Department of Materials Science and Chemical Engineering, Hanyang University, ² Electron Microscopy Research Center, KBSI, ³ IPIT and Department of Physics, Jeonbuk National University, ⁴ Department of Energy Systems Research, Ajou University, ⁵ Department of Physics, Ajou University
WD3-D-2 16:15-16:30	Channel Switching-Based Negative Differential Resistance Behavior with Post-Fabrication Adjustability by Light/Gate Voltage Co-Control Seongjae Kim, Yunchae Jeon, and Hocheon Yoo Department of Electronic Engineering, Gachon University
WD3-D-3 16:30-16:45	A Multi-deposition Method for High-performance Solution-processed Carbon Nanotube Network Transistors Hanbin Lee ¹ , Jeonghee Ko ¹ , Yulim An ¹ , Hyo-In Yang ¹ , Dong Myong Kim ¹ , Dae Hwan Kim ¹ , Jong-Ho Bae ¹ , Minhoo Kang ² , and Sung-Jin Choi ¹ ¹ School of Electrical Engineering, Kookmin University, ² Department of Nano-process, NNFC
WD3-D-4 16:45-17:00	Optically Programmable Floating-Gate Small Molecules-Based Heterojunction Transistors Exceeding a Programmed/Erased Current Ratio of 10^7 Seungme Kang, Seongjae Kim, and Hocheon Yoo Gachon University
WD3-D-5 17:00-17:15	Low-temperature Ferroelectric $\text{Hf}_{0.5}\text{Zr}_{0.5}\text{O}_2$ Device for BEOL Integration Hye Ryeon Park ¹ , Jeong Gyu Yoo ¹ , Seongbin Park ¹ , Yong Chan Jung ² , Jiyoung Kim ² , and Si Joon Kim ¹ ¹ Kangwon National University, ² The University of Texas at Dallas
WD3-D-6 17:15-17:30	InAlGaAs MQW Regrowth on InP/Si Bonding Template 윤소연 ^{1,2} , 김호성 ¹ , 박민수 ² , 한원석 ¹ ¹ 한국전자통신연구원 광통신부품연구실, ² 동아대학교 전자공학과
WD3-D-7 17:30-17:45	Charge Injection Barrier Control by Small-Molecular Buffer and Its Effects on a Hybrid Complementary Inverter Circuit Youngmin Han, Seongjae Kim, Chang-Hyun Kim, and Hocheon Yoo Department of Electronic Engineering, Gachon University