



제 30회 한국반도체학술대회

The 30th Korean Conference on Semiconductors

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

2023년 2월 15일(수), 10:45-12:30

Room E (루비 II, 5층)

E. Compound Semiconductors 분과

[WE2-E] Compound Semiconductor II

좌장: 차호영 교수(홍익대학교)

WE2-E-1 10:45-11:15 [초청]	Near-Junction Thermal Management for High-Power Electronics Jungwan Cho <i>School of Mechanical Engineering, Sungkyunkwan University</i>
WE2-E-2 11:15-11:30	Impact of $\text{Hf}_{1-x}\text{Al}_x\text{O}_2$ Gate Dielectric in the Performance Enhancement of AlGaIn/GaN High Electron Mobility Transistors Ju-Won Shin ¹ , Walid Amir ¹ , Surajit Chakraborty ¹ , Atish Bhattacharjee ¹ , Hyo-Joung Kim ¹ , Jae-Moo Kim ² , and Tae-Woo Kim ¹ ¹ <i>School of Electrical, Electronic, and Computer Engineering, University of Ulsan</i> , ² KANC
WE2-E-3 11:30-11:45	Cryogenic Switches based on InGaAs HEMT for Quantum Signal Routing Jaeyong Jeong ¹ , Seong Kwang Kim ¹ , Jongmin Kim ² , Jisung Lee ³ , Joon Pyo Kim ¹ , Bong Ho Kim ¹ , Yoon-Je Suh ¹ , Dae-Myeong Geum ¹ , Seung-Young Park ³ , and SangHyeon Kim ¹ ¹ <i>School of Electrical Engineering, KAIST</i> , ² KANC, ³ KBSI
WE2-E-4 11:45-12:00	In_{0.53}Ga_{0.47}As MOS Interface Optimization Using Post Deposition Annealing and Post Metal Annealing for Photo-FET on Si Wafer Sung-Han Jeon ^{1,2} , Dae-Hwan Ahn ¹ , Jindong Song ¹ , Woo-Young Choi ² , and Jae-Hoon Han ¹ ¹ <i>Center for Opto-Electronic Materials and Devices, KIST</i> , ² <i>Department of Electrical and Electronic Engineering, Yonsei University</i>
WE2-E-5 12:00-12:15	Positive-Bias-Stress Instability Assessment of AlGaIn/GaN HEMTs during On-State Condition Walid Amir ¹ , Ju-Won Shin ¹ , Ki-Yong Shin ¹ , Surajit Chakraborty ¹ , Takuya Hoshi ² , Takuya Tsutsumi ² , Hiroki Sugiyama ² , Hideaki Matsuzaki ² , and Tae-Woo Kim ¹ ¹ <i>Department of Electrical, Electronic, and Computer Engineering, University of Ulsan</i> , ² NTT Device Technology Laboratories, NTT Corporation
WE2-E-6 12:15-12:30	Study of Delta-doping Dopants on GaAs Tunnel Junctions and Their Thermal Degradation toward High Efficiency III-V/Si Tandem Cell May Angelu Madarang ^{1,2} , Rafael Jumar Chu ^{1,2} , Yeonhwa Kim ^{1,3} , Eunkyo Ju ¹ , Quang Nhat Dang Lung ^{1,2} , Tae Soo Kim ^{1,4} , Won Jun Choi ¹ , and Daehwan Jung ^{1,2} ¹ <i>Center for Opto-Electronic Materials and Devices, KIST</i> , ² <i>Division of Nano and Information Technology, University of Science and Technology (UST)</i> , ³ <i>Department of Materials Science and Engineering, Korea University</i> , ⁴ <i>School of Electrical and Electronic Engineering, Yonsei University</i>