



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)

<p>WE2-E-1 10:45-11:15 [초청]</p>	<p>Near-Junction Thermal Management for High-Power Electronics Jungwan Cho <i>School of Mechanical Engineering, Sungkyunkwan University</i></p>
<p>WE2-E-2 11:15-11:30</p>	<p>Impact of $\text{Hf}_x\text{Al}_{1-x}\text{O}$ Gate Dielectric in the Performance Enhancement of AlGaN/GaN High Electron Mobility Transistors Ju-Won Shin¹, Walid Amir¹, Surajit Chakraborty¹, Atish Bhattacharjee¹, Hyo-Joung Kim¹, Jae-Moo Kim², and Tae-Woo Kim¹ ¹<i>School of Electrical, Electronic, and Computer Engineering, University of Ulsan</i>, ²<i>KANC</i></p>
<p>WE2-E-3 11:30-11:45</p>	<p>Cryogenic Switches based on InGaAs HEMT for Quantum Signal Routing Jaeyong Jeong¹, Seong Kwang Kim¹, Jongmin Kim², Jisung Lee³, Joon Pyo Kim¹, Bong Ho Kim¹, Yoon-Je Suh¹, Dae-Myeong Geum¹, Seung-Young Park³, and SangHyeon Kim¹ ¹<i>School of Electrical Engineering, KAIST</i>, ²<i>KANC</i>, ³<i>KBSI</i></p>
<p>WE2-E-4 11:45-12:00</p>	<p>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 Ahn¹, Jindong Song¹, Woo-Young Choi², and Jae-Hoon Han¹ ¹<i>Center for Opto-Electronic Materials and Devices, KIST</i>, ²<i>Department of Electrical and Electronic Engineering, Yonsei University</i></p>
<p>WE2-E-5 12:00-12:15</p>	<p>Positive-Bias-Stress Instability Assessment of AlGaN/GaN HEMTs during On-State Condition Walid Amir¹, Ju-Won Shin¹, Ki-Yong Shin¹, Surajit Chakraborty¹, Takuya Hoshi², Takuya Tsutsumi², Hiroki Sugiyama², Hideaki Matsuzaki², and Tae-Woo Kim¹ ¹<i>Department of Electrical, Electronic, and Computer Engineering, University of Ulsan</i>, ²<i>NTT Device Technology Laboratories, NTT Corporation</i></p>
<p>WE2-E-6 12:15-12:30</p>	<p>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 Ju¹, Quang Nhat Dang Lung^{1,2}, Tae Soo Kim^{1,4}, Won Jun Choi¹, 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></p>