



제 31회 한국반도체학술대회

The 31st Korean Conference on Semiconductors

2024년 1월 24일(수)-26일(금) | 경주화백컨벤션센터(HICO)

2024년 1월 26일(금), 15:40-17:25

Room E(105), 1층

E. Compound Semiconductors 분과

[FE3-E] Compound Semiconductor - Modeling & Process

좌장: 이종원 박사(NNFC)

<p>FE3-E-1 15:40-15:55</p>	<p>Investigation on Carrier Transport Properties for AlGaIn/GaN HEMTs on SiC from the L_g Scaling Behavior of Transconductance in Saturation</p> <p>Hyo-Jin Kim¹, In-Geun Lee¹, Wan-Soo Park¹, Hyeok-Jun Lee¹, Jae-Hak Lee¹, Kyoungsoon Yang², and Dae-Hyun Kim¹</p> <p>¹Kyungpook National University, ²KAIST</p>
<p>FE3-E-2 15:55-16:10</p>	<p>Enhancing Carrier Transport In AlGaIn/GaN HEMTs Through Structural Optimization And Transconductance Modeling</p> <p>Hyo-Joung Kim, Walid Amir, Surajit Chakraborty, Hyeon-Cheol Jeong, Myeong-Jun You, and Tae-Woo Kim</p> <p>School of Electrical and Electronic Engineering, University of Ulsan</p>
<p>FE3-E-3 16:10-16:25</p>	<p>Comprehensive Analysis of Self-heating Effects in Multi-finger GaN-on-SiHEMTs</p> <p>Jaeyong Jeong¹, Sung Joon Choi¹, Joonsup Shim¹, Eunjung Kim¹, Seong Kwang Kim¹, Bong Ho Kim¹, Joon Pyo Kim¹, Yoon Je Suh¹, Nahyun Rheem¹, Woo jin Beak¹, Dae Myeong Geum², Yumin Koh³, Donghyun Kim³, and Sanghyeon Kim¹</p> <p>¹School of Electrical Engineering, KAIST, ²School of Electronic Engineering, Chungbuk National University, ³KANC</p>
<p>FE3-E-4 16:25-16:40</p>	<p>The Impact of T-Gate Head Size on Radiation Tolerance in GaN HEMTs</p> <p>Sung-Jae Chang¹, Dong-Seok Kim², Hyun-Wook Jung¹, Dohyun Kim¹, Il-Gyu Choi¹, Youn-Sub Noh¹, Sang-Heung Lee¹, Seong-Il Kim¹, Ho-Kyun Ahn¹, Jong-Won Lim¹, and Dong-Min Kang¹</p> <p>¹Photonic/Wireless Convergence Research Department, ETRI, ²Korea Multi-Purpose Accelerator Complex, KAERI</p>
<p>FE3-E-5 16:40-16:66</p>	<p>Extraction of Effective Mobility for $In_{0.8}Ga_{0.2}As/In_{0.52}Al_{0.48}As$ QW HEMTs at Cryogenic Temperature</p> <p>Sang-Pyeong Son¹, Ji-Hoon Yoo¹, Seung-Woo Son¹, In-Geun Lee¹, Jae-Hak Lee¹, Kyoungsoon Yang², and Dae-Hyun Kim¹</p> <p>¹Kyungpook National University, ²KAIST</p>



제 31회 한국반도체학술대회

The 31st Korean Conference on Semiconductors

2024년 1월 24일(수)-26일(금) | 경주화백컨벤션센터(HICO)

FE3-E-6 16:55-17:10	AlGaN/GaN 이종 접합 트랜지스터의 격리 공정을 위한 이온주입 공정 연구 Jun-Hyeok Yim, Seung-Heon Shin, Min-Jeoung Kim, Dong-Ik Oh, Min-Keun Lee, Min-Gi Jeong, and Ho-Young Cha School of Electronic and Electrical Engineering, Hongik University
FE3-E-7 17:10-17:25	Next Generation Infrared Detector based on Type-II Superlattice Hyun-Woo Jang ¹ , Jun-Ho Eom ¹ , Byung-Hyuk Kim ¹ , Han Jung ¹ , Sun Ho Kim ² , Jun Hee Choi ³ , Sang-Sun Yong ⁴ , and Young Ho Kim ¹ ¹ i3system, Inc., ² Agency of Defense Development, ³ KRIT, ⁴ Korea Aerospace Research Institute