



제 31회 한국반도체학술대회

The 31st Korean Conference on Semiconductors

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

2024년 1월 25일(목), 10:55-12:40

Room E(105), 1층

E. Compound Semiconductors 분과

[TE2-E] Compound Semiconductor - High-Power Devices

좌장: 차호영 교수(홍익대학교), 문재경 교수(한국전자통신연구원)

TE2-E-1 10:55-11:10	P형 물질 (NiO_x , CuO_x) 특성에 따른 $\alpha\text{-Ga}_2\text{O}_3$ PN 접합 다이오드의 항복 전압 및 소자 특성변화 연구 Hyeon-Yeong Jeong ¹ , Hyun-Ho Jeong ¹ , Hyeon-Cheol Kim ¹ , Tae Hoon Jang ² , Kyu-Hwan Shim ^{1,2} , and Chel-Jong Choi ¹ ¹ Jeonbuk National University ² R&D Division, Sigetronics, Inc.
TE2-E-2 11:10-11:25	MOCVD-grown Ga_2O_3 -on-SiC, Ga_2O_3 -on- Al_2O_3 이종 구조의 열전도도 계측 Taeyeon Kim ¹ , Jihyun Kim ¹ , Jonggu Lee ¹ , Hyeongyoon Kim ² , Jihyun Park ² , Daewoo Jeon ² , and Jungwan Cho ¹ ¹ School of Mechanical Engineering, Sungkyunkwan University, ² KICET
TE2-E-3 11:25-11:40	A New Method of Forming Junction Termination Extension through Epitaxial Growth for High Voltage SiC Power Devices Sangyeob Kim, Sumin Park, Gukhwa Jeon, Jinhun Kim, Kanghee Shin, Dusan Baek, and Ogyun Seok Kumoh National Institute of Technology
TE2-E-4 11:40-11:55	Improving the Surge Characteristics of SiC MOSFETs by Using Embedded Poly-Si SBDs Gyuhyeok Kang, Yeongeun Park, Hyowon Yoon, Chaeyun Kim, Sangyeob Kim, Gukhwa Jeon, and Ogyun Seok Kumoh National Institute of Technology
TE2-E-5 11:55-12:10	Turn-on 상태의 1.2 kV SiC MOSFET 의 감마선 조사 영향 분석 김채윤 ¹ , 윤효원 ¹ , 박영은 ¹ , 김상엽 ¹ , 강규혁 ¹ , 전국화 ¹ , 김동석 ² , 석오균 ¹ ¹ 금오공과대학교, ² 한국원자력연구원
TE2-E-6 12:10-12:25	Crystallographic Chemical Etching Behavior of GaN Nanostructures Hyesu Ryu ¹ , Hak-Jong Choi ² , Mandar Kulkarni ⁴ , Hokyun Rho ³ , Ga Eun Kim ¹ , Hyungjun Lim ² , Sang Wan Ryu ⁴ , and Sang Hyun Lee ¹ ¹ School of Chemical Engineering, Chonnam National University, ² Nano-Convergence Mechanical Systems Research Division, KIMM, ³ Energy Convergence Core-Facility, Chonnam National University



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TE2-E-7
12:25-12:40

2kV Vertical GaN PiN Diode for High Power Device Applications
Hyung-Seok Lee, Donghan Kim, Sooyoung Moon, and Sung-Bum Bae
ETRI