2025년 2월 12일(수)-14일(금) | 강원도 하이원리조트

Future Normal in Semiconductor

2025년 2월 14일(금), 10:55-12:40 Room M(다이아몬드 I), 6층

E. Compound Semiconductors 분과

O65_[FM2-E] Optoelectronics

좌장: 이기원 교수(원광대학교), 이인근 교수(경북대학교)

	Quantum Efficiency Enhancement of LWIR Type-II Superlattice Detectors
	Using Guided-Mode Resonance
FM2-E-1	SEUNG-YEOP AHN ¹ , JINHA LIM ¹ , DAE-MYEONG GEUM ^{1,2} , DONGHO GWAK ¹ , KANG KO-
10:55-11:10	KU ³ , JUN HO EOM ³ , YOUNG HO KIM ³ , and SANGHYEON KIM ¹
	¹ School of Electrical Engineering, KAIST, ² Department of Electronic Engineering, Inha
	University, ³i3system, Inc.
	중적외선 검출을 위한 표면 암전류 저감 T2SL 광검출기 array 제작
FM2-E-2	한재훈 1 , 김상현 2 , 송진동 1 , 강준현 3 , 한일기 3
11:10-11:25	1한국과학기술연구원, 양자기술연구단, 2한국과학기술원, 3한국과학기술연구원,나노포토닉
11.10 11.20	스연구센터
	Short-Wave Infrared Detection Using Quantum-Well Photo-HEMTs
FM2-E-3 11:25-11:40	
	Yuna Lee ^{1,2} , DaeHwan Ahn ¹ , Kyunghwan Kim ¹ , Kyul Ko ¹ , SungHan Jeon ¹ , Juwon Seo ³ ,
	JoonHyun Kang ³ , Woo-Young Choi ² , and Jae-Hoon Han ¹
	¹Center for Quantum Technology, KIST, ²Department of Electrical and Electronic
	Engineering, Yonsei University, ³ Nanophotonics Research Center, KIST
FM2-E-4 11:40-11:55	Demonstration of ~1W High-output Power SWIR Laser Diodes Using an
	Optimized Sb-Based Laser Structure
	Eungbeom Yeon ^{1,2} , Seungwan Woo ^{1,3} In-Hwan Lee ² , Daehwan Jung ¹ , and Won Jun
	Choi ¹
	¹ Center for Quantum Technology, KIST, ² Department of Materials Science and Engineering,
	Korea University, ³ Department of Materials Science and Engineering, Seoul National
	University
	Monolithically Integrated SWIR/MWIR Dual-band Infrared Thin-film
	Photodetector
FM2-E-5	Seungwan Woo ^{1,2} , Eungbeom Yeon ¹ , Ho Won Jang ² , Daehwan Jung ¹ , and Won Jun
11:55-12:10	Choi ¹
	¹ Center for Quantum Technology, KIST, ² Department of Materials Science and Engineering,
	Seoul National University



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FM2-E-6 12:10-12:25	자외선 이중대역내 선택적 검출을 위한 이종접합 GaN/Ga₂O3 기반 광 검출기
	연구
	김선 $\mathrm{I}^{1,2}$, 김형 E^2 , 박지현 2 , 전대우 2 , 황완식 1
	1한국항공대학교 신소재공학과, 2한국세라믹기술원 디스플레이소재센터
FM2-E-7 12:25-12:40	Optoelectronic Logic Operations based on the Poling Effect of CuO/BaTiO ₃
	Heterojunction Photodetectors with Ultra-Low Power Consumption
	Junhyung Cho ¹ , Wangmyung Choi ¹ , Taehyun Park ^{1,2} , and Hocheon Yoo ^{1,2}
	¹ Department of Semiconductor Engineering, Gachon University, ² Department of Electronic