



제 29회 한국반도체학술대회

The 29th Korean Conference on Semiconductors

2022년 1월 24일(월)~ 26일(수) | 강원도 하이원 그랜드호텔(컨벤션타워)

2022년 1월 26일(수), 09:00-10:30

Room K (다이아몬드 I, 6층)

F. Silicon and Group-IV Devices and Integration Technology 분과

[WK1-F] Photonic Device Technology

좌장: 조성재 교수(가천대학교)

<p>WK1-F-1 09:00-09:15</p>	<p>Capacitance Matching for a Non-volatile SIS Optical Phase Shifter with an HZO MFM Capacitor Jae-Hoon Han¹, Seung-Min Han^{1,2}, Dae-Hwan Ahn¹, Woo-Young Choi², and Jin-Dong Song¹ ¹Center for Opto-Electronic Materials and Devices, KIST, ²Department of Electrical and Electronic Engineering, Yonsei University</p>
<p>WK1-F-2 09:15-09:30</p>	<p>Free-Carrier Absorption-Assisted Photodetection Using A TiO_x/Ti/TiO_x Tri-Layer Film-Based Waveguide Bolometric Detector for Si Photonic Sensors Joon-sup Shim¹, Jinha Lim¹, Dae-Myeong Geum¹, Jong-Bum You², Joon Pyo Kim¹, Woo Jin Baek¹, Jae-Hoon Han³, and SangHyeon Kim¹ ¹KAIST, ²NNFC, ³KIST</p>
<p>WK1-F-3 09:30-09:45</p>	<p>Non-Volatile Resonance Wavelength Shift of a Si PN Ring Resonator with an HZO Ferroelectric Capacitor Seung-Min Han^{1,2}, Dae-Won Rho², Dae-Hwan Ahn¹, Jin-Dong Song¹, Woo-Young Choi², and Jae-Hoon Han¹ ¹Center for Opto-Electronic Materials and Devices, KIST, ²Department of Electrical and Electronic Engineering, Yonsei University</p>
<p>WK1-F-4 09:45-10:00</p>	<p>Performance Estimation of a Highly Efficient and Low-loss KTN Optical Phase Shifter for Silicon Photonics Seong Ui An, Yu Shin Kim, Seung Hyeon Han, and Younghyun Kim Department of Photonics and Nanoelectronics, BK21 FOUR ERICA-ACE Center, Hanyang University</p>
<p>WK1-F-5 10:00-10:15</p>	<p>Avalanche Mode LED based on CMOS Technology Doyoon Eom^{1,2}, Woo-Young Choi¹, and Myung-Jae Lee² ¹Department of Electrical and Electronic Engineering, Yonsei University, ²Post-Silicon Semiconductor Institute, KIST</p>
<p>WK1-F-6 10:15-10:30</p>	<p>Guard Ring 최적화를 통한 Single-Photon Avalanche Diode의 성능 향상 Hyun-Seung Choi^{1,2}, Youngcheol Chae¹, and Myung-Jae Lee² ¹Department of Electrical and Electronic Engineering, Yonsei University, ²Post-Silicon Semiconductor Institute, KIST</p>