

Room F (Sicily), 2F

Chair: Tatsuro Hiraki (NTT, inc.)

Tu4F

June 30 (Tue), 2026

III-V on Silicon Active Devices I

15:00-16:30

Tu4F-1

15:00-15:15

Optical Chiplet with 0.30-pJ/bit Receiver Using Membrane III-V Photodetector on Si

Yoshiya Shikama^{1,2}, Suguru Yamaoka^{1,2}, Tatsuro Hiraki^{1,2}, Tadashi Minotani^{1,2}, Yohei Saito¹, Takuma Aihara^{1,2}, Yoshiho Maeda^{1,2}, Toru Miura¹, Takuro Fujii^{1,2}, Yuichi Tsujita^{1,2}, Tomonari Sato^{1,2}, Norio Sato^{1,2}, Yuzo Sasaki¹, Shinji Matsuo²

¹NTT Device Innovation Center, ²NTT Device Technology Labs

Tu4F-2

15:15-15:30

90-GHz-Bandwidth Membrane EA-DFB Laser on Si with Wide Operating Temperature Range

Hiroshi Kato^{1,2}, Takuma Aihara^{1,2}, Tatsuro Hiraki^{1,2}, Yoshiho Maeda^{1,2}, Takuro Fujii^{1,2}, Tomonari Sato^{1,2}, Shinji Matsuo²

¹NTT Device Innovation Center, ²NTT Device Technology Labs

Tu4F-3

Invited

15:30-16:00

Active Meta-optical Fiber Integrated Devices

Ho Wai Howard Lee, Andrew Palmer, Yucheng Jin, Harvey Lin, Jin Yan, A. Teoh, Emma Wallace-Wilmot, Sophia Turean
University of California

Tu4F-4

16:00-16:15

High-Efficient and Compact InP/Si Heterogeneously Integrated Coherent-Receiver PICs Using Chip-on-Wafer Bonding

Takuya Mitarai^{1,2}, Takuya Okimoto^{1,2}, Shun Kimura^{1,2}, Takehiko Kikuchi^{1,2}, Naoko Inoue^{1,2}, Naoki Fujiwara^{1,2}, Nobuhiko Nishiyama^{2,3}, Hideki Yagi^{1,2}

¹Sumitomo Electric Industries, Ltd, ²Photonics Electronics Technology Research Association, ³Institute of Science Tokyo

Tu4F-5

16:15-16:30

Monolithic InAs/GaAs Quantum-Dot Laser Diodes on Si for Silicon Photonics Enabled by All-MOCVD Epitaxy: Benchmarking Against GaAs and Ridge-Engineered Functionality

HoSung Kim¹, Honghwi Park², Seungchul Lee², Dae-Myeong Geum², Daehwan Jung³, Won Seok Han²

¹Samsung Advanced Institute of Technology, ²Electronics and Telecommunications Research Institute,

³Korea Institute of Science and Technology