

Grand Ballroom 4 (Grand Ballroom 4), 2F

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Poster Session I

June 29 (Mon), 2026

16:30-18:00

P1-1 16:30-18:00

Dynamic RIN Modeling of SOA-based Incoherent Pump Module for Forward Raman Amplification

Koji Igarashi¹, Kazuaki Kiyota², Shigehiro Takasaka², Junji Yoshida²

¹The University of Osaka, ²Furukawa Electric Co., Ltd.

P1-2 16:30-18:00

Photo and Current Pumped CirD Laser Operated under RT-CW Conditions

Wataru Fukuda, Fuma Hayashi, Rubing Zuo, Yuto Nakai, Masato Morifuji, Hirotake Kajii, Tetsuya Yagi, Akihiro Maruta, Nobuhiko Kikuchi, Masahiko Kondow
University of Osaka

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Comparative Analysis of Ge- and GaAs-Based InGaAs/GaAsP Multi-Quantum Wells Epitaxy

Zeyu Wan¹, Yun-Cheng Yang², Chao-Hsin Wu², Guangrui Xia¹

¹The University of British Columbia, ²National Taiwan University

P1-4 16:30-18:00

Fully Digital OPLL for Thin-Film Lithium-Niobate Lasers Enabling Frequency Stabilization and Linewidth Narrowing

Zuyu Li¹, Nuoqi Yang¹, Meiqi Li¹, Bin Zhang¹, Fan Li¹
Sun Yat-Sen University

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A Repetition Rate Tunable (5 MHz~3.4 GHz) Semiconductor Mode-Locked Laser

Yueying Niu, Defan Sun, Fei Guo, Ruikang Zhang, Dan Lu
University of Chinese Academy of Sciences

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Heterogeneous Integration of InAlGaAs DFB Laser on a SiC substrate

Tung-Hsuan Lin, Yu-Yen Huang, Wei-Cheng Feng, Yu-Hao Tu, Chung-wei Hsiao, Yang Jeng Chen, Yi-Jen Chiu
National Sun Yat-Sen University

P1-7 16:30-18:00

Chirp-Aware Transmission Analysis of 100-Gb/s-PAM4 CWDM4 EMLs Using Gaussian Pulse Modeling and TDECQ Measurements

K-H Huang, Jian Fang, Ming Yu, Xiaoli Ge, Chen Gao, Zhongbao Wu, Cedric Gao, Jiaheng, Kaifeng Yang
Zetta Semiconductor Co., Ltd

P1-8 16:30-18:00

High Spurious Suppression Wideband Signal Generation based on Optical Injection Locking

Xukai Ji, Zheng Wang, Jiale Qiao, Yuchen Huang, Feifei Yin, Yitang Dai, Kun Xu
Beijing University of Posts and Telecommunications

P1-9 16:30-18:00

Development of High-Speed AlGaInP Red RF Micro-LEDs for Optical Communication Systems

Yee Chee Keong, Zhi-An Lin, Ming-June Wu, Natchanon Prechatavanich, Cheng-En Wu, Zi-Wei Chye, Chao-Hsin Wu
National Taiwan University

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Design and Optimization of an a-Si:H Intermediary Layer for O-band SOA Integration on a Photonic Platform

Daehong Kim¹, Honghyuk Kim¹, Jinkwan Kwoen², Younghyun Ki¹
¹Hanyang University, ²The University of Tokyo

P1-11 16:30-18:00

Continuous-Wave Laser in a Femtosecond-Laser-Inscribed Yb:YVO₄ Channel Waveguide

Ji-Hoon Park, Jungyoon Kim, Deok-Woo Kim, Yungeun Oh, Young-Jin Kim, Fabian Rotermund
Korea Advanced Institute of Science and Technology

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Ultracompact 48×48 Silicon Photonic Arrayed Waveguide Grating Router with 100GHz Spacing

Xin Fu, Yingyi Liu, Lan Yan⁰, Lin Yang
Chinese Academy of Sciences

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Ultra-Low Stitching Loss Waveguide Interfaces for Wafer-Scale Photonic Routing Using Angled and Inverse Tapers

Taewon Jin, Seokhyeon Yoon, Younghyun Kim
Hanyang University

P1-14 16:30-18:00

67-GHz Low-Loss GCPW with Periodic Vias for High-Speed Optical Interconnects

Min-Yen Hsieh¹, Chien-Wei Huang¹, Chun-Nien Liu¹, Zingway Pei¹, Cheng-Mu Tsai¹, Zhi-Ting Ye¹, Chun-Wei Tsai², Wood-Hi Cheng¹
¹National Chung Hsing University, ²National United University

P1-15 16:30-18:00

Highly Uniform Emission from Tantalum Pentoxide Grating Couplers Fabricated by Single-Step Contact Lithography

Junke Zhou, Mingjian You, Zhenyu Liu, Zhengqi Li, Ning Ding, Jiaxin Hou, Weiren Cheng, Ziming Zhang, Xingyu Tang, Shengjie Liu, Qiwei Zheng, Qiancheng Zhao¹,
Southern University of Science and Technology

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Rapid Initial Phase Calibration of OPA via Enhanced SPGD Algorithm with Nesterov-Accelerated Adaptive Moment Estimation

Songyang Li, Lei Zhang
Beijing University of Posts and Telecommunications

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Design of PtSe₂-Based Waveguide-Integrated Polarizers

Tianping Xu^{1,2,3}, Si Chen^{1,2,3}, Zunyue Zhang^{1,2,3}, Tiegeng Liu^{1,2,3}, Jiaqi Wang⁴, Zhenzhou Cheng^{1,2,3}
¹State Key Laboratory of Precision Measuring Technology and Instruments, ²Tianjin University, ³Key Laboratory of Opto-electronic Information Technology, ⁴Shenzhen University

P1-18 **16:30-18:00**

Near-Field Characterization of Azimuthally Polarized Beams with Different Nanoprobes

Yajuan Dong^{1,2}, Xiaotong Zhu^{1,2}, Yu Wang^{1,2}, Jinwei Zeng^{1,2}, Jian Wang^{1,2}
¹Huazhong University of Science and Technology, ²Optics Valley Laboratory

P1-19 **16:30-18:00**

Non-Reciprocal Polarization Rotation Enabled by Metasurface-Based Optical Platform

Yoon-Ho Sunwoo¹, Yun-Jae Kwon¹, Jong-Guk Jeong¹, Xie Zou¹, Woo-Bin Lee¹, Duk-Yong Choi², Sang-Shin Lee¹
¹Kwangju University, ²Australian National University

P1-20 **16:30-18:00**

On-Chip Photonic Neural Network Processors by Low-Rank Approximation

Weiwei Pan, Min Gong, Heng Chen, Chen Ji
Zhejiang University

P1-21 **16:30-18:00**

Design of High-Order Series-Coupled Microring Resonator Wavelength Filters Using Success-History-Based Adaptive CMA-ES

Nao Murasawa, Taro Arakawa
Yokohama National University

P1-22 **16:30-18:00**

Femtosecond Laser Direct-Writing Lithium Niobate-Based Type-II Mode Converter Device

Xuhu Han¹, Yuying Wang¹, Jiacheng Hu¹, Lijing Zhong², Jianrong Qiu¹
¹Zhejiang University, ²Ningbo University

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Reconfigurable Multifunctional Nano-Photonic Device for Thermal Photonics Management

Mingyu LUO, Zhengyu ZHANG, Chao LU
The Hong Kong Polytechnic University

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High-Capacity OAM-SK via Envelope-Comb Target-Locking Microring Arrays

Zili Cai, Zhang Tian, Qi Chen, Yihang Lai, Jubo Hao, Jian Dai, Kun Xu
Beijing University of Posts and Telecommunications

P1-25 **16:30-18:00**

High-Sensitivity Strain Sensor based on a Mach-Zehnder Interferometer with Optical Vernier Effect

Jun Wang, Hu Zhang, Jiaqi Wang, Yihui Li, Yijie Rong, Xiaoguang Zhang
Beijing University of Posts and Telecommunications

P1-26 **16:30-18:00**

Ghost-Correlation Suppression in BOCDR based on Reference-Switching Subtraction

Ryo Shibasaki¹, Keita Kikuchi^{1,2}, Yosuke Mizuno², Heeyoung Lee¹
¹Shibaura Institute of Technology, ²Yokohama National University

P1-27 **16:30-18:00**

Brillouin Characterization of High-Numerical-Aperture Silica Fibers and Demonstration of Distributed Sensing

Shu Iwasaki¹, Keita Kikuchi^{1,2}, Natsuho Yagishita², Shimbu Shirai², Yosuke Mizuno², Heeyoung Lee¹
¹Shibaura Institute of Technology, ²Yokohama National University

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Ultrahigh Sensitive Fiber FPI Sensor Using Triangularly-Ground SMFs with Vernier Effect

Ciao-Huei Chung, Chin-Ping Yu
National Sun Yat-sen University

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High-Sensitivity Peanut Allergen Detection Using an Anti-Resonant Fiber Biosensor

Ching-Hsiang Shih¹, Bo-Chen Guan¹, Chang-Yue Chiang², Chien-Hsing Chen³, Cheng-Ling Lee¹
¹National United University, ²National Changhua University of Education, ³National Pingtung University of Science and Technology

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High-Sensitivity Fiber-Optic Current Sensor Using a Novel Reflective FLRD

Peng Xiang¹, Yuan Ke¹, Can Li¹, Junchang Huang^{1,2}, Li Xia¹
¹Huazhong University of Science and Technology, ²Chinese Academy of Sciences

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Dual-Channel Fiber-Optic Current Sensor based on a 4×4 Single-Mode Fiber Coupler

Yuan Ke¹, Can Li¹, Peng Xiang¹, Jianguang Li², Zili Xu², Wei Li¹, Li Xia¹
¹Huazhong University of Science and Technology, ²China Electric Power Research Institute

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Low-Frequency Vibration Detection Using Dual-Pulse Coherent Scheme in Φ -OTDR

MengtingYu¹, HaiwenHuang¹, LeiDong², WuLiu³, HanbingLi³, MingLuo³, XiangLi¹
¹ChinaUniversityofGeosciences, ²Wuhan WUTOS Co., Ltd., ,China, ³Information and Communication Technologies Group Corporation

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Brillouin Sensing Characteristics of a Highly Birefringent Spun Optical Fiber

Jun Gi Hong, Kwang Yong Song
Chung-Ang University

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BOTDA-Based Distributed Surface Temperature Mapping for Experimental Evaluation of Radiative Cooling Materials

Radomyr Diachenko, Kwanil Lee
Korea Institute of Science and Technology

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Investigation of Laser Linewidth Effects in LFM-Based Phase Sensitive Optical Time Domain Reflectometry

Xi CHEN¹, Maoqi Liu¹, Zixian Wei¹, Changyuan YU¹, Zhaohui Li²
¹The Hong Kong Polytechnic University, ²Sun Yat-sen University

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A Study on Fiber-Optic Shape Sensing Techniques under Low-Curvature Conditions

Hyuga Kurokawa¹, Shintaro Nakamoto¹, Makito Kobayashi¹, Nobutomo Hanzawa², Takashi Matsui², Kazuhide Nakajima², Kiyoshi Kamimura², Hideaki Murayama¹
¹The University of Tokyo, ²NTT, inc.

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300-Gb/s 32-QAM Self-Coherent FSOC Transmission System for Intra-DCI

Sang-Rok Moon¹, Sun Hyok Chang¹, Hun-Sik Kang¹, Sunghyun Bae²
¹Electronics and Telecommunications Research Institute, ²Sejong University,

P1-38 **16:30-18:00**

Optically Powered Remote Unit With Uplink Remote Modulation Using a Pure-Silica Inner-Cladding Double-Clad Fiber

Satoshi Fujita¹, Naoto Ohnishi¹, Yuki Gomi¹, Shih-Chun Lin², Suresh Subramaniam³, Hiroshi Hasegawa⁴, Motoharu Matsuura¹

¹University of Electro-Communications, ²North Carolina State University, ³George Washington University, ⁴Nagoya University

P1-39 **16:30-18:00**

Demonstration of ODN Monitoring for Discriminating Active and Inactive Fibers in Heterogeneous Passive Optical Networks

Kwang Ok Kim, Kyeong Hwan Doo, Hwan 2Seok Chung
Electronics and Telecommunications Research Institute

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End-to-End BER-TDECQ Prediction and Bandwidth-Driven Modulation Optimization for 448-Gb/s PAM4/6/8 IM/DD Links

Govind Sharan Yadav, Sheng-Yuan Zheng, Kai-Ming Feng
National Tsing Hua University

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Demonstration of Remote-Control-Enabled Bidirectional 100 Gbps Optical Transceiver for All Photonic Network

Kenichi Nakura, Hayato Suga, Satoshi Yoshima, Tadashi Tomizuka, Noriaki Nakamura, Ryo Matsue, Hiroaki Shintaku
Mitsubishi Electric Corporation

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Power-Over-Fiber Using a Pure-Silica Inner-Cladding Double-Clad Fiber for Fire Detection System in Expressway Tunnels

Yuto Terada¹, Hayato Seto¹, Naoto Ohnishi¹, Yuki Okumura², Taku Nakayama², Hiroki Ueda², Masaki Hiro², Susumu Morikura¹, Motoharu Matsuura¹

¹University of Electro-Communications, ²Nippon Expressway Research Institute Company Limited

P1-43 **16:30-18:00**

Demonstration of Cross-Domain Optical Switching Control Using Open Platform: O-RAN RIC and TransportPCE

Naotaka Shibata, Hirotaka Ujikawa, Takumi Harada, Yuka Okamoto, Tomoya Hatano, Tatsuya Shimada
NTT, inc.

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Causally Disentangled Hierarchical Model for Open-Set Fault Diagnosis in Optical Networks

Bingli Guo¹, Yuting Ma¹, Yu Zhou¹, Shanguo Huang¹, Yu Tang², Yan Shi², Guangquan Wang²

¹Beijing University of Posts and Telecommunications, ²China Unicom Research Institute

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Slot-Based Deterministic Bandwidth Allocation for Industrial Passive Optical Networks

Kyeong Hwan Doo, Kwang Ok Kim, Hwan Seok Chung
Electronics and Telecommunications Research Institute

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Preflight-Gated Sim-to-Real Transfer for AI-Driven Natural-Language PON Operations

Chansung Park, Yongwook Ra, Hwan Seok Chung
Electronics and Telecommunications Research Institute

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Spectrum-QAM Based 1-TBaud Coherent Transmitter with Optical Fourier Transform

Chi Zhang¹, Saiyang Liu¹, Lun Li¹, Wenying Chen², Yitian Gong²

¹The Hong Kong Polytechnic University, ²Huazhong University of Science and Technology

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Enhanced Power Profile Estimation Integrating Residual Regression and Power Fitting

Lixia Xi, Zengyi Sun, Yichao Wang, Yu Zhang, Tianrun Sun

Beijing University of Posts and Telecommunications

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GSNR Estimation Method Using Pre-FEC BER Under Controlled Received Power

Ken Ito¹, Hiroshi Shibata¹, Kohei Watanabe¹, Motohiro Banno², Shinji Morimoto², Yosho Kanda²

¹NTT, inc., ²Anritsu Corporation

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Mitigation of Turbulence-Induced Depolarization and Scintillation in FSO Systems with Partially Coherent Beams

Nan Cui, Qingxuan Li, Boyang Hou, Zhipeng Zheng, Xiaoguang Zhang

Beijing University of Posts and Telecommunications

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Mitigation of Equalization-Enhanced Phase Noise by Joint Timing and ML Phase Recovery

Xinwei Du¹, Ziyuan Liu¹, Wenqiang Ma¹, Qiong Li¹, Qian Wang², Changyuan Yu³, Pooi-Yuen Kam⁴

¹Beijing Normal-Hong Kong Baptist University, ²Zhejiang University of Technology, ³The Hong Kong Polytechnic University, ⁴The Chinese University of Hong Kong

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Abnormal Noise Location Estimation Using APSK Scattering Coefficient-Modulated Signal

Ryosuke Takagi¹, Takumi Motomura², Kaito Geshi¹, Akihiro Maruta¹, Ken Mishina¹

¹The University of Osaka, ²National Institute of Technology, Nara College

P1-53 16:30-18:00

Nonlinear Distortion Compensation in Optical Fibers for Inter-Satellite All-Optical Networks

Kota Kurome¹, Shoichiro Oda², Satoshi Shinada², Ken Mishina¹

¹The University of Osaka, ²National Institute of Information and Communications Technology

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MLSE with Novel Adaptive Transition-Based Noise Whitening Post Filter

Meng-Ting Zhuo¹, Jyehong Chen¹, Widhianto Benedictus Yohanes Bagus²

¹National Yang Ming Chiao Tung University, ²MediaTek Inc.

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Hexagonal Search Pattern for Acquiring Inter-Satellite Link Under Elliptical Uncertainty Area

JaeHun Jang, Hyungjun Kim, Hyosang Yoon

Korea Advanced Institute of Science and Technology

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QAM Quantum Noise Stream Cipher in LEO-LEO Laser Inter-Satellite Links

Yajie Li, Ran Zhao, Ziyang Chen, Shuang Wei, Wei Wang, Yongli Zhao, Jie Zhang

Beijing University of Posts and Telecommunications

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Measurement of Tx and Rx I/Q Frequency Response Using a CADD Receiver

Takaya Maeda, Masaki Sato, Kohei Hosokawa

NEC Corporation

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Laser Frequency Noise Characterization based on Adaptive Extended Kalman Filter

Dawei Wang¹, Jinghang Huang¹, Jinpeng Liao¹, Zhenlin Zhao¹, Xingwen Yi²

¹Sun Yat-sen University, ²Bangor University

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Channel Prediction for Satellite Optical Communications Using a Dual-Branch Model

Zhenming Yu, Wei Zhang, Hongyu Huang, Xiangyong Dong, Yan Ma, Kun Xu

Beijing University of Posts and Telecommunications

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Polarization Estimation in Focused Light Propagating through a Fluctuating Refractive Index Field

Yoshihisa Takayama

Tokai University

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Turbulence-Resilient Channel Configuration of Mode-Division Multiplexed System Using Mode Diversity with a Limited Mode Pool

Hoon Kim, Jinbae Park

Korea Institute of Science and Technology

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Energy Advantage of Self-Coherent Receiver in Ground-to-LEO FSO Uplink

Zehua Li, Amila Kariyawasam, Shunji Kimura

Kyushu University

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Subcarrier-Paired Phase Encryption for Modulation-Layer Security in DCO-OFDM

Takahiro Kodama, Kiichiro Kuwahara, Hyuga Nagami, Haruto Miyamoto, Kaho Mitani, Tadashi Utsunomiya, Seigo Tamura, Keita Tanaka

Kagawa University

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RC Channel Equalization for Satellite Optical Links with SOA-Based Activations

Feng Wen¹, Qiao Huang¹, Hanwen Gao¹, Xin Hu¹, Feng Yang², Baojian Wu¹, Kun Qiu¹

¹University of Electronic Science and Technology of China, ²Marolabs Co. Ltd.

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Universalized Privacy in Distributed Quantum Sensing

Hyang-Tag Lim¹, Min Namkung¹, Dong-Hyun Kim¹, Seongjin Hong², Yong-Su Kim¹, Su-Yong Lee³

¹Korea Institute of Science and Technology, ²Yonsei University, ³Agency for Defense Development

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Single Photon Detector Characterization Using Frequency Domain Interferometric Method

Nishanth Chandra, Anubhav Kumar, Pradeep Kumar Krishnamurthy

Indian Institute of Technology Kanpur

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Distributed Quantum Sensing with Multi-Mode N00N States for Arbitrary Weights

Seongjin Hong, Hyunwoo Yoo, Dong-Hyun Kim, Hyang-Tag Lim

Korea Institute of Science and Technology

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Gain Sensing Using Two-Mode Bright Squeezed States

Seongjin Hong, Yu-Yeong Jeong
Yonsei University

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Quantum Deep Metrology Based Quantum Performance Benchmarking

Ajung Kim¹, H.Y. Kim¹, Lucas Son², Y.H. Gu¹
¹Sejong University, ²SQK inc.

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Compact VCSEL-Swept FBG Interrogation System, Powered by Cost-Efficient FPGA

Sanghoon Chin, Séverine Denis
CSEM

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A 0.06 pm Resolution Chip-Scale Coherent Optical Spectrum Analyzer based on External Cavity Laser

Hexi Han¹, Qingshuai Su¹, Fang Wei¹, Xiangyue Li², Chen Chen¹, Haoyang Pi³, Han Liu¹, Wei Chu¹, Haiwen Cai¹
¹Zhangjiang Laboratory, ²Fudan University, ³Shanghai Institute of Optics and Fine Mechanics

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Annealing-Induced Phase Transformations and Interfacial Kinetics in Dion-Jacobson Perovskite Bilayers

Fabian Rotermund¹, Deokhyun Yoon¹, Jaehee Lee¹, Junho Park², Jangwon Seo¹
¹Korea Advanced Institute of Science and Technology, ²Korea Research Institute of Standards and Science

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Colorless Fiber Optic Micro-Vibration Sensor Using Circulating Optical Feedback

Ching Hung Chang, Chih Yen Li
National Chiayi University

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A Wedge-Shaped Side-Polished Fiber Bragg Grating Biosensor for Label-Free IgG Detection

Chia-Cheng Cheng¹, Chang-Yue Chiang², Wen-Fung Liu¹, Kun-Huang Chen¹
¹Feng Chia University, ²National Changhua University of Education

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Cavity Length Matched Phase Demodulation for High-Finesse Fabry-Perot Acoustic Sensor

Ziyu Zhang¹, Shengquan Mu²
¹The Hong Kong Polytechnic University, ²Huazhong University of Science and Technology

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Measurement Range Extension in CSDI Using a Tunable Filter and a Dispersive Ring Cavity

Eun Seo Choi, Hyun Sung Kim, Hye Jun Ma
Chosun University

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Early Detection of Surface Tracking in Polymeric Insulators Using Optical Fiber-Based Distributed Acoustic Sensing

Balaji Srinivasan, V R Ranjith, R Akash, P S Harrish¹, R Sarathi
Indian Institute of Technology Madras