

# **2023 Asia Communications and Photonics Conference/2023 International Photonics and Optoelectronics Meetings (ACP/POEM 2023)**

**Wuhan, China  
4-7 November 2023**

**Pages 1-762**



**IEEE Catalog Number: CFP2339B-POD  
ISBN: 979-8-3503-1262-1**

**Copyright © 2023 by the Institute of Electrical and Electronics Engineers, Inc.  
All Rights Reserved**

*Copyright and Reprint Permissions:* Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

**\*\*\* *This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP2339B-POD
ISBN (Print-On-Demand):	979-8-3503-1262-1
ISBN (Online):	979-8-3503-1261-4

**Additional Copies of This Publication Are Available From:**

Curran Associates, Inc  
57 Morehouse Lane  
Red Hook, NY 12571 USA  
Phone: (845) 758-0400  
Fax: (845) 758-2633  
E-mail: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

## TABLE OF CONTENTS

Hollow-Core Fiber with Eight U-Shaped Tubes.....	1
<i>Yu Pan, Yu Cheng, Houquan Liu, Yiming Xiao, Libo Yuan</i>	
Mode Crosstalk Mitigation Based on Convolutional Neural Network in Direct Detection Mode Division Multiplexing Passive Optical Network .....	4
<i>Li Chen, Hui Yang, Lianshan Yan, Xiaoyu Lu</i>	
Temperature Dependence Characteristics and Noise Characteristics of InGaAs/InAlAs X-Ray APDs .....	8
<i>Wenqiang Ding, Yanli Zhao</i>	
Research on Novel Coplanar Waveguide Electrodes for Enhancing the Bandwidth of Photodiodes .....	12
<i>Tonghui Li, Yu Li, Xiaole Gong, Xiaofeng Duan, Kai Liu, Yongqing Huang</i>	
Demonstration of a Novel Solution for Mobile Fronthaul Based on WDM Visible Light Transmission Over Multi-Mode Fiber Link .....	15
<i>Xianhao Lin, Zengyi Xu, Zhiteng Luo, Junwen Zhang, Chao Shen, Nan Chi</i>	
Prediction of Optical Fiber Cable Lifespan Based on Bi-LSTM and Attention Mechanism.....	19
<i>Weihua Lian, Yuan Li, Mengchao Niu, Jiaye Zhu, Wei Li</i>	
Temperature-Independent Integrated Optical Sensor Based on a Fabry-Perot Cavity Using the Slot Hybrid-Core Waveguide.....	24
<i>Zhaoyang Chen, Yanqing Qiu, Tingting Lang, Xiaowei Guan</i>	
“Invisible” Pulsation of Harmonic Mode-Locking in a Bidirectional Fiber Laser .....	27
<i>Qingbo Wang, Pan Wang, Zhi Wang, Yan-Ge Liu</i>	
Multi-Dimensional Energy Limitation in Sphere Shaping for Nonlinear Interference Noise Mitigation .....	30
<i>Jingtian Liu, Elie Awwad, Yves Jaouën</i>	
Investigations of Wavefront Shaping for Improving the Transmission Distance of VCSEL-MMF Based Optical Communication Links.....	35
<i>Daohui Hu, Lin Sun, Gordon Ning Liu, Gangxiang Shen, Bin Chen</i>	
Microwave Photonic Imaging Radar Based on Polarization Multiplexing Coherent Receiving.....	38
<i>Qingshui Guo, Qiang Zhang, Tongkai Xu, Shuo Liu, Wanshu Xiong, Kun Yin</i>	
Estimation and Compensation of Electronic-Opto Frequency Response on Carrier Less Phase Retrieval Receivers.....	42
<i>Qi Gao, Hanzi Huang, Haoshuo Chen, Ziyue Liu, Yuanzhe Qu, Zhengxuan Li, Yingxiong Song</i>	
Experimental Demonstrations of Point-To-Multipoint Flexible Optical Transceiver-Enabled Concurrent Direct Inter-ONU and Upstream Communications in IMDD PONs .....	45
<i>Wei Jin, Lin Chen, Jiaxiang He, Roger Philip Giddings, Ming Hao, Jianming Tang</i>	
Innovation and Field Trial of Optical Service Unit (OSU) Based Metro-Optimized OTN Technologies.....	48
<i>Ruiquan Jing, Chengliang Zhang, Junjie Li, Heng Zhou, Yadong Gong, Yuanbin Zhang, Xiaoli Huo, Chengxin Duan</i>	

Fault Prediction for Optical Access Network Equipment Using Decision Tree Methods .....	52
<i>K. Murphy, A. Lavignotte, C. Lepers</i>	
Narrow Linewidth, Tunable External Cavity Diode Laser Using AlGaAs-Si <sub>3</sub> N <sub>4</sub> Hybrid Integration .....	57
<i>Chen Chen, Fang Wei, Xiuyou Han, Qingshuai Su, Haoyang Pi, Anton Stroganov, Qing Ye, Haiwen Cai</i>	
Research on the Performance of the LDPC-OQPSK System Used in Underwater Wireless Optical Communication .....	60
<i>Yi Yang, Qian Liu, Jiayuan Lei, Zixuan Zhao, Leyan Li, Liang Jiao</i>	
Design and Performance of High-Speed InGaAs/InGa <sub>0.351</sub> As <sub>0.755</sub> P Modified-Pin Photodiodes .....	65
<i>Yu Li, Tonghui Li, Xiaole Gong, Kai Liu, Yongqing Huang, Xiaofeng Duan</i>	
Applications of Free Space Optics in Terrestrial Backhaul .....	70
<i>Buzheng Wei, Shikui Shen, Guangquan Wang, He Zhang, Xiongyan Tang, Liang Zhao</i>	
Entanglement Assisted Quantum Radar Demonstration Over Turbulent Free-Space Optical Channels .....	74
<i>Ivan B. Djordjevic, Vijay Nafria</i>	
Chaotic Constellation Shaping Synchronization Header Assistance Cognate Coherence OFDM-FSO Communication .....	78
<i>Wenhui Zhu, Tingwei Wu, Yejun Liu, Song Song, Lun Zhao, Lei Guo</i>	
MSONoC: A Metasurfaces-Assisted Optical Networks-On-Chip Architecture .....	82
<i>Zimo Wang, Pengxing Guo, Jiahao Zhou, Kun Liu, Zhengrong You, Weigang Hou, Lei Guo</i>	
Digital Twin-Enabled Service Optimization Sequence of Actions for Power Equalization .....	87
<i>Chenyu Sun, Xin Yang, Gabriel Charlet, Photios A. Stavrou, Yvan Pointurier</i>	
On-Chip Constant-Coefficient Second-Order Differential Equation Solver Based on Microdisk with Dual- Mode Alignment.....	90
<i>Jiahao Zhou, Pengxing Guo, Zhengrong You, Zimo Wang, Kun Liu, Weigang Hou, Lei Guo</i>	
Mode Multiplexer Based on Multiplane Light Conversion Using a Monolayer Metasurface.....	94
<i>Mian Wu, Lin Wu, Jin Tao</i>	
Linear Fitting-Based Residual Frequency Offset Compensation in Simultaneous Transmitting and Sensing System Using Coherent Transponders .....	96
<i>Hao Zhou, Wen Zuo, Yaojun Qiao, Yan Zhao, Bing Ye</i>	
Crosstalk Estimation in Multicore Fiber with Random Bending, Twisting and Structure Fluctuations Perturbations .....	100
<i>Shiwen Hou, Lian Xiang</i>	
Integrated Radar Jamming and Secure Wireless Communication Based-On Photonics at Ka-Band .....	104
<i>Yanyi Wang, Dongju Du, Yingxiong Song, Zhengxuan Li, Nan Ye, Qianwu Zhang, Junjie Zhang, Jian Chen, Bingyao Cao, Jianjun Yu</i>	
Decision Feedback Channel Estimation for Integrated Mobile VLCP Based on STBC-MIMO .....	109
<i>Yuzhe Sun, Xiaodi You, Jian Chen, Changyuan Yu, Mingyi Gao, Gangxiang Shen</i>	
High-Efficient Silicon Microring Modulator of 3D Omni-Junction Profile .....	113
<i>Zijian Zhu, Yingxuan Zhao, Fuwan Gan</i>	

Automatic Bias Point Control for Optical IQ Modulators Based on LFM Dithers and Fractional Fourier Transform.....	117
<i>Zheli Liu, Mingming Zhang, Weihao Li, Zihe Hu, Can Zhao, Ming Tang</i>	
Highly Efficient and Differentially Driven Thin-Film Lithium Niobate Modulators Based on Reversely-Poled Arms .....	120
<i>Sheng Yu, Quan Cao</i>	
Experimental Evaluation of Human Skin Optical Clearing in Vivo Efficiency Using Biocompatible Agents and Optical Coherence Tomography .....	123
<i>Walter Blondel, Sergey M. Zaytsev, Valery V. Tuchin, Elina A. Genina, Dan Zhu, Marine Amouroux</i>	
Revival of In-Line Partial Dispersion Compensation for Reducing Cross-Phase Modulation Penalty in WDM Systems .....	127
<i>Qingyi Guo, Wing-Chau Ng, Yang Lan, Zhiping Jiang</i>	
High-Power 1.5 $\mu\text{m}$ InGaAsP/InP BH Laser Having Dilute Waveguide Structure .....	130
<i>Guo Jing, Li Huan, Zhao Lingjuan, Zhou Daibing, Liang Song</i>	
The Advantages of Dual-Layer Broadband Filter Spectrometers in Improving Ill-Conditioned Spectrum Reconstruction Processes .....	133
<i>Ding Zhao, Jie Bao</i>	
Convolutional Neural Network Based Equalization for 112-Gbit/s High Speed Optical Link .....	138
<i>Na Li, Wei Li, Qianggao Hu, Yi Jiang, Liyan Huang, Peili He, Zhongshuai Feng</i>	
Industrial PON Application Innovation Pilot Based on 50G-PON and XG-PON Hybrid Architecture.....	142
<i>Jialiang Jin, Dezhi Zhang, Ming Jiang, Dekun Liu, Zhe Du, Hui Sun, Ziyao Yang, Tao Zeng, Heng Yue, Xiao Yu, Feng Zhu</i>	
Experimental Optimization of Entropy and Channel Spacing Combination in Unrepeated Transmission Using 128 GBd PCS-16QAM .....	146
<i>Alexis Busson, Hans Bissessur, Juan Esparza</i>	
Dynamic Routing, Spatial Channel and Spectrum Assignment (RSCSA) in Spatial Channel Networks (SCNs) .....	150
<i>Yu Zheng, Weichang Zheng, Mingcong Yang, Yongbing Zhang</i>	
50 Gb/s Directly Modulated 1.3 $\mu\text{m}$ InGaAlAs/InP DFB Laser Having MQW Based Passive DBR Section.....	155
<i>Li Huan, Zhu Xuyuan, Guo Jing, Zhou Daibing, Zhao Lingjuan, Liang Song</i>	
Frequency-Tunable Narrow Linewidth THz Signal Generation by Semiconductor Lasers Subject to Mutual Optical Injection.....	158
<i>Xiaoyue Yu, Fangzheng Zhang, Guanqun Sun, Zhidong Lv, Shilong Pan, Changming Zhang, Xianbin Yu</i>	
Comb Span Extension of a Mode-Locked Laser Diode by Pumping a Highly Nonlinear Fiber Loop.....	161
<i>Defan Sun, Dan Lu, Ruikang Zhang, Tingwu Ge, Jinlong Xiao, Lingjuan Zhao</i>	
Stepped Frequency Radar with Broadband Signal Generation by Period One Laser Dynamics.....	164
<i>Boyang Wu, Fangzheng Zhang, Xiaoyue Yu, Xing Wang, Shilong Pan, Xinyi Li</i>	
A Broadband Double-Lined Metasurface for Simultaneous Generation of Inverse Functions .....	168
<i>Zongkun Zhang, Ming-Zhe Chong, Jin Zhao, Yueyi Zhang, Pu-Kun Liu</i>	

A User-Centric Cell-Free Network Architecture for Bidirectional VLC Based on Tri-Color LEDs .....	171
<i>Xiuqi Huang, Chih-Yung Yang, Qiguan Chen, Min Zhang</i>	
Multilevel Polar-Coded PAM-8 with MSB Shaping Over Turbulent FSO Communication Link.....	176
<i>Weiyang Yang, Xiaoyu Liu, Zhiyang Liu, Shilin Xiao</i>	
Accurate Nonlinearity Characterization of Dual-Polarization 16QAM Transmitter Using Four-Level Probability-Maintained Notch Signal.....	180
<i>Tong Ye, Xiaofei Su, Ke Zhang, Jingnan Li, Hisao Nakashima, Takeshi Hoshida, Zhenning Tao</i>	
Optimization of NB-QC-LDPC Codes with Column Weight Not Exceeding Three.....	183
<i>Jingke Zou, Liqian Wang</i>	
Impact Analysis of Multi-Path Interference on Real-Time 5G Front-Haul Transmission System with 50Gbit/s IM-DD Transceivers .....	187
<i>Xia Sheng, Hao Liu, Yangbo Wu, Qunbi Zhuge, Anxu Zhang, Kai Lv, Lipeng Feng, Yuyang Liu, Xiaoli Huo, Junjie Li, Jia Feng, Bowen Tan</i>	
Denoising Convolutional Neural Network for Wideband Frequency Modulation Signals Based on Microwave Photonic Down-Conversion .....	191
<i>Shilin Chen, Tao Pu, Li Wang, Jilin Zheng, Gengze Wu, Jin Li, Xin Zhang, Jiaqi Zhao</i>	
A CGAN-Aided Autoencoder Supporting Joint Geometric Probabilistic Shaping for Optical Fiber Communication System.....	196
<i>Yuzhe Li, Huan Chang, Qi Zhang, Xiangjun Xin, Ran Gao, Feng Tian, Qinghua Tian, Fu Wang, Zhipei Li</i>	
Experimental Demonstration of Ultra-Wide O-Band WDM Unrepeated Transmission Over 80 Km G.652 with 25 Gbit/s IM/DD Transceivers.....	199
<i>Hao Liu, Xia Sheng, Lei Wang, Ji Deng, Kai Lv, Anxu Zhang, Lipeng Feng, Yuyang Liu, Xiaoli Huo, Junjie Li</i>	
High-Speed C-Band Transmission Using the Advanced Low-Complexity Threshold-Assisted Memory Polynomial Equalizer.....	203
<i>Fei Xie, Xiaoqian Huang, Hengying Xu, Yaojun Qiao</i>	
Coherent Joint Transmission with 1024-QAM for 6G Distributed-MIMO Networks with Analog Radio-Over-LWIR Fronthaul Links .....	207
<i>Rafael Puerta, Mahdieh Joharifar, Richard Schatz, Anders Djupsjöbacka, Armands Ostrovskis, Yan-Ting Sun, Grégory Maisons, Johan Abautret, Roland Teissier, Lu Zhang, Sandis Spolitis, Vjaceslavs Bobrovs, Sergei Popov, Xianbin Yu, Oskars Ozolins, Xiaodan Pang</i>	
Graphene-Quantum-Dots-Graphene Heterojunction Waveguide Photodetector with Low Dark Current and High Speed .....	211
<i>Laiwen Yu, Jingshu Guo, Xuezhi Zhao, Hengtai Xiang, Liang Gao, Daoxin Dai</i>	
Optical Magnetic Field Enhancement by Strong Coupling for High Sensitivity Sensing .....	214
<i>Huimin Wang, Tao Wang</i>	
Optical Phase-Locked Loop Based on a Hybrid Integrated Self-Injection Locked Laser .....	217
<i>Shuai Shao, Liwei Tang, Minghua Chen</i>	
50 Gb/s Wavelength Tunable DBR Laser Integrated with an Electro-Absorption Modulator.....	219
<i>Meng Yang Zhong, Huan Li, Dan Lu, Lingjuan Zhao, Song Liang, Kun Yang, Daibing Zhou</i>	

Long-Short-Term QoT Prediction for Already Established Light-Path While Considering Light-Path Correlation.....	221
<i>Chenyu Zhao, Xin Li, Lu Zhang, Jingjie Xin, Daixuan Li, Shanguo Huang</i>	
LiDAR Point Cloud Image Modeling and Quality Testing Method .....	225
<i>Chuanchuan Yang, Yao Duan, Yongxin Cao, Jiajie Yang, Wenhua Chen, Hongbin Li</i>	
Power-Efficient, Ultra-Broadband and Reconfigurable Four-Mode Converter.....	230
<i>Shijie Sun, Yuanhua Che, Tianhang Lian, Daming Zhang, Xibin Wang</i>	
Design of Heterogeneous 4LP-Mode Multicore Fiber with Two-Ring Layout .....	233
<i>Zheyu Zhao, Takanori Sato, Takeshi Fujisawa, Kunimasa Saitoh</i>	
Bound State in the Continuum Enabled Ultralong Silicon Waveguide Grating Antennas for Integrated LiDAR Applications.....	237
<i>Zhipeng Ma, Yao Fu, Yuanjian Wan, Han Cao, Jian Wang, Yu Zhang</i>	
MLSE-Assisted Overlapped DFE for Error-Propagation Suppression in 201-Gb/s PAM-8 IM-DD Systems.....	240
<i>Jiahao Zhou, Jing Zhang, Xue Zhao, Zhengyu Ma, Bo Xu, Kun Qiu</i>	
Image Encoding and Recovery Based on Inhibited Spiking Dynamics of VCSEL Neuron.....	243
<i>Zhifei Duan, Xiaodong Lin, Yingke Xie, Xiaorui Du, Xue Wu, Lin Ma, Zhengmao Wu, Tao Deng</i>	
Experimental Comparisons Between TPS-64QAM and UD-16QAM Over a Bandwidth-Limited 25-Tb/s 6300-Km Transmission System .....	247
<i>Xiaoshuo Jia, Yan Li, Jingwei Song, Zixiong Jin, Chao Yang, Ming Luo, Runzhe Fan, Jifang Qiu, Xiaobin Hong, Hongxiang Guo, Zhisheng Yang, Jian Wu</i>	
A High-Accuracy Modulation Format Recognition Scheme Based on NFDM System.....	251
<i>Jinwang Bai, Yongjun Wang, Xingyuan Huang, Lu Han, Haifeng Yang, Gang Feng</i>	
Deep Learning Based Free Space Optical Communication Diversity System .....	255
<i>Hui Peng, Liqian Wang</i>	
Polarization-Insensitive Four-Channel Wavelength-Division (de)Multiplexer Based on Cascaded Mach-Zehnder Interferometers with Adiabatic Couplers .....	259
<i>Huan Guan, Donghe Tu, Hang Yu, Yuxiang Yin, Zhiguo Yu, Zhiyong Li</i>	
Single-Mode Topological Valley-Hall Laser Via Spatially Distributed Injection.....	262
<i>Xiao-Tian Cheng, Ling-Fang Wang, Dai-Bao Hou, Jia-Wang Yu, Chen-Hui Li, Xing Lin, Feng Liu, Chao-Yuan Jin</i>	
Optical Forward Error Correction Based on Recirculating Frequency Shifter.....	265
<i>Tianyan Guo, Jiangbing Du, Zuyuan He</i>	
Super-Resolution of Near-Field SAR Imaging Based on Deep Convolutional Neural Network .....	268
<i>Peng Chen, Junjie Qin, Ziwei Ming, Zhengang Yang, Kejia Wang, Jinsong Liu</i>	
0.62 Pb/s Real-Time Transmission Over 360 Km 7-Core MCFs Using 800 Gb/s Transceivers with Widened C+L Band EDFA.....	271
<i>Lipeng Feng, Anxu Zhang, Zhenhua Feng, Haitao Ling, Yang Luo, Lei Zhang, Li Zhang, Lei Shen, Jie Luo, Yuyang Liu, Xia Sheng, Hao Liu, Guangnan Su, Xiaoli Huo, Junjie Li</i>	

Unsupervised Denoising Assisted Channel Impairment Compensation for Next-Generation Optical Access Networks .....	275
<i>Hong Guo, Hui Yang, Pengcheng Deng, Li Chen, Xiaoyu Lu</i>	
A Wide-Broadband Spectrum (110nm) Fabry-Perot Photodetector Enabling Cost-Efficient 10 Gb/s Optical Communications .....	278
<i>Hao Zhong, Zhigang Cao, Zhijia Hu, Zichen Liu, Zhixue He, Chao Li</i>	
Experimental Investigation of Power Loading Algorithm in Downlink Point-To-Multipoint Coherent Systems .....	281
<i>Trung-Hien Nguyen, Abel Lorences-Riesgo, Sami Mumtaz, Celestino Sanches Martins, Abir Hraghi, Clement Jauffret, Wu Zhihang, Yann Frignac, Gabriel Charlet, Yu Zhao</i>	
A Wideband Spread Spectrum Microwave Photonic Transceiver Architecture with Coherent Dual Carriers and Superheterodyne Down Conversion .....	285
<i>Weifeng Su, Naijin Liu, Guangyu Gao, Qijun Liang, Qiang Zhao, Ziyu Liu, Xiang Yan</i>	
InSb All-Dielectric Metasurface for Enhancing Photodetection in Mid-Infrared Silicon Photonics.....	290
<i>Sheng-Yi Wang, Hao Luo, Qiu Wang, Hua Ge, Bo-Wen Jia</i>	
Novel Distribution Matcher Design for Short Length Frames Based on Non-Binary Convolutional Codes.....	294
<i>Rami Klaimi, Akram Abouseif, Ghaya Rekaya-Ben Othman, Yves Jaouën</i>	
Comparison of InAs Waveguide Photodetectors on Silicon Platform Via Different Heteroepitaxial Structures.....	298
<i>Hao Luo, Sheng-Yi Wang, Hua Ge, Xiang Li, Bo-Wen Jia</i>	
Carrier-Assisted Ultra-Fast Phase Retrieval in Direct Detection DSCM System.....	302
<i>Xiuquan Cui, Linsheng Fan, Jianyu Wang, Yuchen Jia, Jiebing Lin, Yong Yao, Yanfu Yang</i>	
400 Gb/s DWDM Field Trial Over a Record Distance of 3820 Km G.654.E Fiber Link with 107 GBAud Transceivers and C-Band EDFAs.....	305
<i>Chengliang Zhang, Anxu Zhang, Zhiwen Fan, Kai Lv, Lipeng Feng, Yuyang Liu, Xiaoli Huo, Junjie Li, Jitao Gao, Yudi Fu, Chen Duan, Songtao Chen, Bin Zhang, Qi Yang, Deming Liu</i>	
Roll-Off Insensitive and Robust Receiver IQ Skew Monitoring Based on Nonlinear Godard Algorithm for DSCM Systems .....	309
<i>Yuchen Jia, Linsheng Fan, Qun Zhang, Xiuquan Cui, Siyu Gong, Jianyu Wang, Muqi Liu, Yong Yao, Yanfu Yang</i>	
Backward-Emitting Antenna Based on Ridge Subwavelength Grating Array Enabled High Wavelength Sensitivity .....	313
<i>Weijie Xu, Junjia Wang</i>	
Nonlinear Distortion Mitigation Via Coherent All-Optical Reservoir Computing for Long-Haul IM-DD Transmission Systems.....	316
<i>Guanju Peng, Yaping Liu, Zheng Li, Kunpeng Zhu, Zhiqun Yang, Janping Li, Shigui Zhang, Zhanhua Huang, Lin Zhang</i>	
Raman Gas Sensor Based on Platinum Coated Capillary.....	321
<i>Zhixiong Liu, Qilu Nie, Mengen Cheng, Dexun Yang, Minghong Yang, Donglai Guo</i>	
Investigation on the Coexistence of Real-Time DAS System and High-Speed Coherent Optical Signal.....	325
<i>Yiqi Li, Hu Shi, Yan Zhao, Zhongshu Zhang, Mo Zhu, Zhanshan Wang</i>	

A Low-Loss Polarization-Splitting Grating Coupler Based on Inverse-Design .....	328
<i>Lan Wu, Jifang Qiu, Lihang Wang, Yuchen Chen, Hongxiang Guo, Jian Wu</i>	
Optimization Design of Arrayed Waveguide Grating Using Dual-Etched Multimode Interference Aperture.....	331
<i>Xudong Du, Yu Cheng, Tao Shi, Jinhua Chen, Chen Ji</i>	
Quantum Imaging with a Nonlinear Metasurface Photon-Pair Source.....	335
<i>Jihua Zhang, Jinliang Ren, Jinyong Ma, Andrey A. Sukhorukov</i>	
Active Mode Multicasting Without Parasitic Wavelength Conversion Arising in Few-Mode Fiber.....	338
<i>Xiaoshan Huang, Gai Zhou, Cong Zhang, Meng Xiang, Songnian Fu, Yuwen Qin</i>	
High Numerical Aperture Piezopolymer Detectors for Optoacoustic Imaging of Experimental Neoplasms .....	341
<i>Alexey Kurnikov, Grigory Volkov, Anna Orlova, Andrey Kovalchuk, Yulia Khochenkova, Daniel Razansky, Pavel Subochev</i>	
Fused Tapered Fan-In/Fan-Out Device of 6-Mode 7-Core Fiber Based on OM3 Multimode Fiber .....	345
<i>Chen Yang, Haoze Du, Yuanhui Shao, Fengming Zhang, Zhuyixiao Liu, Senyu Zhang, Zhiyong Zhao, Ming Tang</i>	
Energy-Efficient and Low-Latency Optical Network-On-Chip Architecture and Mapping Solution for Artificial Neural Networks.....	349
<i>Kun Liu, Pengxing Guo, Jiahao Zhou, Zimo Wang, Zhengrong You, Weigang Hou, Lei Guo</i>	
Joint Self-Homodyne Coherent Transmission and Distributed Vibration Detection Using a (1+8) Multicore Fiber.....	353
<i>Haoze Du, Mingming Zhang, Zhiyong Zhao, Siqi Yan, Chen Yang, Ming Tang</i>	
Ultralow-Loss Power Splitters Based on Shape Optimization Method.....	356
<i>Yijun He, Jifang Qiu, Bowen Zhang, Suping Jiao, Hongxiang Guo, Jian Wu</i>	
A Data-Efficient Erbium-Doped Fiber Amplifier Model Under Partial Channel Loadings .....	359
<i>Yuqi Li, Mingming Zhang, Zihe Hu, Zhuoxuan Song, Siqi Yan, Ming Tang</i>	
800 Gbps Integrated Silicon Photonics Receiver Chip Based on Cascaded Mach-Zehnder Interferometer (MZI) Lattice Filters.....	362
<i>Ruiqi Luo, Maojing Hou, Nan Liu, Qiao Wang, Xiaoke Ruan, Guandong Liu, Wei Ma</i>	
Silicon Photonic Filter Using an Elliptical Micro-Ring with Small Bent Radius and Ultra-Large FSR.....	365
<i>Xu Hua Cao, Yu Hao Zhang, Ming Li, Ning Hua Zhu, Wei Li</i>	
GPU-Efficient Deployment of Ring All-Reduce-Based Distributed Model Training in Tidal Computing Power Network .....	368
<i>Yingbo Fan, Yajie Li, Boxin Zhang, Ling Chen, Yahui Wang, Jiaxing Guo, Wei Wang, Yongli Zhao, Jie Zhang</i>	
Mode Correlation of Mode Diversity Free Space Optical Systems Under Atmospheric Turbulence.....	372
<i>Junjie Chen, Yan Li, Jifang Qiu, Xiaobin Hong, Hongxiang Guo, Jian Wu</i>	
Real-Time Satellite Optical Terminal Prototype with Integrated 10 Gbit/s Bidirectional Digital Video Transmission and Ranging Function.....	377
<i>Lewei Gong, Yuanzhe Qu, Yingxiong Song, Shulei Wang, Qianwu Zhang, Junjie Zhang</i>	

Scattering Losses Minimization in Silicon Nitride Photonic Integrated Circuits for Near-IR and Telecom Bandwidth.....	380
Kirill A. Buzaverov, Aleksandr S. Baburin, Evgeny V. Sergeev, Sergey S. Avdeev, Evgeniy S. Lotkov, Sergey V. Bukatin, Ilya A. Stepanov, Arseniy V. Belyaev, Aleksey B. Kramarenko, Danil V. Kushnev, Alina O. Melekhina, Ilya A. Ryzhikov, Ilya A. Rodionov	
PLSR Enhanced Ultra-Wide Measuring Range Fiber-Optic Curvature Sensor Based on Mode Switching Effect in Four Mode Fiber.....	383
Wei Xu, Mutian Tang, Zhen Li, Enqing Chen, Jin Tao, Changyuan Yu, Chunmin Sheng, Feng Xu	
Deep-Learning-Based Simultaneous Demodulation and Denoising for $\Phi$ -OTDR.....	387
Yongxin Liang, Jialei Zhang, Shibo Zhang, Zhenyu Ye, Anchi Wan, Chunye Liu, Jianhui Sun, Zinan Wang	
A Low Complexity Nonlinear Equalizer Based on Wavelet Clustering Algorithm.....	391
Xiying Ding, Yongjun Wang, Xingyuan Huang, Lu Han, Dewen Chen, Chao Li	
Optical Multipath Interference Noise Resistant Digital RoF Fronthaul Achieving 15-DB SNR Enhancement Based on Uneven Spacing and Bit Interleaving.....	395
Yimin Hu, Yixiao Zhu, Yikun Zhang, Zijun Yan, Gengming Lin, Ziyu Cheng, Weisheng Hu	
Real-Time Implementation of Pilot-Assisted Decision-Based Cycle Slip Elimination for Coherent Optical Receivers .....	400
Zixiong Jin, Yan Li, Jingwei Song, Xiaoshuo Jia, Jifang Qiu, Hongxiang Guo, Xiaobin Hong, Zhisheng Yang, Jian Wu	
Algorithm for Underwater Weak Light Signal Recovery Based on Time Thresholding .....	405
Jianlei Zhang, Pengtao Dang, Bin Zhang, Yi Yang, Qian Liu, Liang Jiao	
Long-Haul Optical Chaos Synchronization Employing Optical Phase Conjugation.....	409
Liang Li, Anlin Yi, Lianshan Yan, Lin Jiang, Bin Luo, Wei Pan	
Silicon Nitride High Confinement Thermally- And E/O Tuned Photonic Integrated Platfrom .....	413
Aleksandr S. Baburin, Sergey S. Avdeev, Arseniy V. Belyaev, Kirill A. Buzaverov, Evgeniy S. Lotkov, Evgeny V. Sergeev, Sergey V. Bukatin, Ali Sh. Amiraslanov, Ilya A. Ryzhikov, Ilya A. Rodionov	
Experimental Demonstration of a Dual-Arm Drop Element-Based Soft-ROADM for Future Optical-Wireless Converged Access Networks .....	416
Omaro Fawzi Abdelhamid Gonem, Roger Philip Giddings, Jianming Tang	
An Improved Hybrid Switching Scheme for UAV-To-Ground ACM FSO System.....	421
Qianwu Zhang, Boyang Liu, Guanwen Chen, Shucheng Zhan, Zhiyu Li, Jing Zhang, Ning Jiang, Bingyao Cao, Zhengxuan Li	
Programmable High-Precision Weight Bank Based on Integrated Semiconductor Optical Amplifier Array.....	424
Jiahui Liu, Kaifei Tang, Xiang Ji, Xin Zhou, Chuanbo Zhang, Ling Wang, Wentao Sun, Pan Dai, Shaobo Li, Xiang Ma, Rulei Xiao, Xiangfei Chen	
Experimental Demonstration of Real-Time in-Vehicle Optical Signal Reception Using FPGA and GPU .....	428
Jinyun Chen, Leyuan Zhang, Lin Sun, Gordon Ning Liu, Zhaohui Li, Changyuan Yu	

Relieving the Limit of Photon-Pairs Generation Rate in Microresonators .....	432
<i>Nuo Chen, Wang Zijie, Hanghang Li, Zhuang Fan, Runru Fan, Qiang Zhou, Xinliang Zhang, Jing Xu</i>	
Experiment and Field Test of Raman Amplifier Based on 400G Communication System .....	436
<i>Chuanbiao Zhang, Xiongyan Tang, Shikui Shen, He Zhang, Yan Shi, Yeqing Zhang, Yakun Hu, Yu Tang</i>	
An On-Chip Optical Quantizer with an ENOB of 5.83 Bits Using a Thermo-Optic Phase Shifter Array.....	440
<i>Donghe Tu, Xingrui Huang, Hang Yu, Yuxiang Yin, Zhiguo Yu, Huan Guan, Lei Jiang, Zhiyong Li</i>	
Service Provisioning in Wavelength-Switched Optical Networks Based on P2MP Transceivers (Invited Paper).....	443
<i>Ruoxing Li, Sijia Li, Zuqing Zhu</i>	
A 56 Gb/s 9.6 mW PAM-4 Receiver Analog Front-End Based on gm-Boosted.....	448
<i>Shunyu Li, Guang Yong Chu, Pengfei Niu, J. C. Velasquez, Shixun Zhang, Guofeng Yang</i>	
High-Precision Micro-Displacement Measurement Based on Self-Calibration and Optoelectronic Oscillators.....	451
<i>Hao Luo, Jinlong Yu, Ju Wang</i>	
Design and Fabrication of a Seven-Mode Mode-Mismatching Photonic Lantern for Mode Purification from Multi-Mode Pump Sources .....	454
<i>Tiecheng Jin, Yan Li, Jifang Qiu, Xiaobin Hong, Hongxiang Guo, Jian Wu</i>	
Probabilistic Path Selection Based on Arbitrerenabled Router in WDM Optical Network-On-Chip .....	458
<i>Daqing Meng, Qiuyan Yao, Hui Yang, Jie Zhang, Nan Feng, Mingqing Zuo, Yucong Liu</i>	
Core and Wavelength Allocation for Joint Optimization in Quantum Access Networks.....	462
<i>Weiwen Kong, Yongmei Sun, Jianjun Tang, Tianqi Dou, Yaixian Gao, Zhenhua Li, Qi Zhao, Yuheng Xie, Na Chen</i>	
Optical Nonlinearity Enhancement in Silicon Nitride Organic Hybrid Strip Waveguide.....	467
<i>Wentao Ye, Lei Lei</i>	
Multi-User Allocation Using Multi-Band OFDM-NOMA in Visible Light Communications .....	471
<i>Xinda Yan, Jin Shi, Eduward Tangdiongga</i>	
Semi-Supervised Feature-Crosses Neural Network Equalizer in Fiber Optics .....	475
<i>Rui Yang, Qi Zhang, Xiangjun Xin, Fu Wang, Jinkun Jiang, Feng Tian, Qinghua Tian, Yongjun Wang, Leijing Yang</i>	
Cost-Efficient Computing Offloading in Computing First Networks Supported by EONs.....	479
<i>Jingjie Xin, Xin Li, Lu Zhang, Chenyu Zhao, Yongjun Zhang, Shanguo Huang</i>	
Utilizing Two-Dimensional Perovskite in a TFBG Humidity Sensor for Improved Soil Moisture Detection .....	484
<i>Xiaoniu Wang, Feng Gao, Yi Yang, Changyu Shen</i>	
Digital Back Propagation Algorithm for Nonlinear Compensation in 54.5GBaud 4000km 16QAM Raman Amplification Transmission System.....	486
<i>Xiaona Zhang, Yan Li, Xiaoshuo Jia, Ming Luo, Chao Yang, Jifang Qiu, Xiaobin Hong, Hongxiang Guo, Zhisheng Yang, Jian Wu</i>	

Photonics-Assisted Broadband Frequency-Hopping System for W-Band MMW Secure Communications.....	491
<i>Hanfeng Wang, Fan Yang, Yuchao Liu, Zhencan Yang, Hao Jiang, Yang Liu, Mo Li, Jiang Zhang</i>	
Balancing the Reception Performance of ONUs in CDM Coherent PON Downstream Signaling by Hadamard Transform Pre-Coding .....	495
<i>Luxiao Zhang, Meng Mao, Lin Sun, Gordon Ning Liu, Zhaojun Li</i>	
Dual Optical Feedback Dynamics of Quantum Dot Lasers in Silicon-Based Photonic Integrated Circuits .....	499
<i>Yuanxiang Wang, Zhiyong Jin, Yong Yao, Xiaochuan Xu, Jianan Duan</i>	
O-Band TOSA Enabled 100 Gbaud PAM-8 Transmission Over 2 Km SSMF with FFE .....	503
<i>Hailin Yang, Meng Xiang, Ruitao Wu, Wenzhuo Cheng, Qin Li, Gai Zhou, Li Zhang, Songnian Fu, Yuwen Qin</i>	
Temporal-Spectral Transient Dynamics of Pulsating Solitons in an Ultrafast Fiber Laser.....	506
<i>Junwen Li, Heping Li, Zhuang Wang, Zhiyao Zhang, Yong Liu</i>	
A High-Throughput QC-LDPC Encoder .....	509
<i>Yifan Ding, Qiang Cao, Jie Yao</i>	
A High-Accuracy Progressive Training Scheme to Combat the Recognition Error of MZI-ONN .....	513
<i>Zhengrong You, Pengxing Guo, Jiahao Zhou, Kun Liu, Zimo Wang, Weigang Hou, Lei Guo</i>	
Transfer-Printing of III - V Photodetector for High-Bandwidth Si -Photonic Integrated Coherent Receiver.....	517
<i>Zhiheng Quan, Qichao Ding, Jun Liu</i>	
Silicon-Based Mode (de)Multiplexer Beyond Single Communication Band Limit.....	521
<i>Siwei Liu, Xin Fu, Hongliang Chen, Guangchen Su, Yujie Huo, Chuang Cheng, Jiaqi Niu, Lin Yang</i>	
Linewidth Narrowing and Intense Optical Pulse Generation in Microscopic Fano Lasers .....	525
<i>Yi Yu, Gaoneng Dong, Aurimas Sakanas, Elizaveta Semenova, Kresten Yvind, Jesper Mork</i>	
Real-Time 3.4-Gbit/s DMT-VLC Transmission with Block Precoding Techniques.....	528
<i>Jie Zhou, Ming Chen, Xu Gao, Rui Deng</i>	
A Stepped Low Density Parity Check Codes Punching Algorithm Based on Multiple Check Matrices .....	533
<i>Rongzhen Xie, Qi Zhang, Xiangjun Xin, Fu Wang, Feng Tian, Qinghua Tian, Yongjun Wang, Leijing Yang, Jinkun Jiang</i>	
Non-Recursive Algorithm for Bounded-Energy Trellis Computation in Enumerative Sphere Shaping.....	537
<i>Jinkun Jiang, Qi Zhang, Xiangjun Xin, Ran Gao, Fu Wang, Zhipei Li, Feng Tian, Qinghua Tian, Yongjun Wang</i>	
Parallel Subnetwork Routing Algorithm for Inter-Satellite Optical Communication.....	541
<i>Yiming Hong, Junjie Zhang, Jingjing Zang, Xiwen Fan, Qianqian Zhao</i>	
A Performance Comparison of Coplanar Strip-Line and Capacitive Loading Traveling Wave Electrode InP Mach-Zehnder Modulators .....	544
<i>Ruoyun Yao, Weiwei Pan, Yili Liu, Zhangwan Peng, Yiti Xiong, Chen Ji</i>	

Sparse Bayesian Learning-Based Channel Estimation for Indoor OTFS Visible Light Communication .....	547
<i>Yuxuan Liao, Jianhua Pei, Weijie Dai, Jian Song, Yuhang Dong</i>	
Receiver Sensitivity Improvement with Joint Geometric and Probabilistic Shaping for 200G Flexible Coherent Passive Optical Network.....	552
<i>Gengming Lin, Yixiao Zhu, Zijun Yan, Yimin Hu, Xi Chen, Qunbi Zhuge, Weisheng Hu</i>	
Photonics-Based Microwave Signal Replication with Low Noise Figure Using a Hybrid Amplifier.....	557
<i>Yifan Pu, Zhongyang Xu, Shilong Pan</i>	
Impact of Unbalanced Interferometer on Laser Frequency Sweep Linearization .....	560
<i>Gang Hu, Hangtian Lu, Xiuyuan Sun, Zhongyang Xu, Shilong Pan</i>	
Microwave Radar System Based on Chaotic Photonic Compressed Sensing .....	563
<i>Anran Li, Ning Jiang, Qiang Zhang, Huanhuan Xiong, Yiqun Zhang, Gang Hu, Yongsheng Cao, Kun Qiu</i>	
Theoretical Analysis of Geometric Phase Noise in Self-Homodyne Coherent Systems .....	566
<i>Zongkai Li, Meng Qiao, Xin Wang, Dawei Wang</i>	
A High-Power Modified Uni-Traveling-Carrier Photodiode (MUTC- PD) Operating at 1310nm Band for Radio-Over-Fiber (RoF) Communication System.....	569
<i>Shuhu Tan, Xuejie Wang, Yongqing Huang, Kai Liu, Xiaofeng Duan, Xiaomin Ren</i>	
Underwater Real-Time Mobile Duplex Video Transmission Using Visible Light .....	572
<i>Jiehui Liu, Lin Ma, Zuyuan He</i>	
Inverse Designed Optical Phased Array Antenna Based on the Direct Binary Search Algorithm for Angle-Customized Beam Emission.....	574
<i>Weijie Xu, Junjia Wang</i>	
Calibration of LiNbO <sub>3</sub> -Based Polarization Controller with Simplified Principle and RMSProp Algorithm .....	577
<i>Linan Shan, Qingmin Lu, Peng Sun, Xiaoguang Zhang, Lixia Xi, Xiaosheng Xiao</i>	
Complete and Low-Complexity Frequency-Dependent IQ Crosstalk Compensation for High-Baud-Rate Coherent Optical Transceiver.....	580
<i>Ziheng Zhang, Longquan Dai, Zicai Cao, Mengfan Cheng, Qi Yang, Deming Liu, Lei Deng</i>	
Analysis on the Anti-Fading Dynamic Characteristics of Optical Injection Locking System Under Active Polarization Scrambling.....	584
<i>Kun Li, Mingming Zhang, Weihao Li, Ziwen Zhou, Sisi Yan, Ming Tang</i>	
Optical True Time Delay Compensation Network-Based Beam Tracking for THz Massive MIMO Systems.....	589
<i>Shilong Jia, Chongfu Zhang, Zixin Zhao, Lipeng Dai, Huan Huang, Songnian Fu, Kun Qiu</i>	
An Innovative Temporal Convolutional Network(TCN) Combined with Self-Attention Mechanism for Fiber Nonlinear Compensation .....	594
<i>Jingyan Yin, Zili Fang, Xiaoqian Feng, Jiyuan Cai, Lixia Xi, Wenbo Zhang</i>	
20 Gbps Free-Space Optical Chaotic Communication Based on Orbital Angular Momentum Multiplexing .....	598
<i>Yiqun Zhang, Ning Jiang, Anran Li, Mengjie Zhou, Shuangcheng Chen, Jiasheng Ding, Gang Hu, Yongsheng Cao, Kun Qiu</i>	

Optical Modulation Format Identification Under Hybrid OSNRs Using LIN Model .....	602
<i>Weiwen Chen, Meng Liang</i>	
2×2 SOI Optical Switch with Robust High Extinction Ratio on All Paths Enabled by Parabolic MMI Coupler.....	607
<i>Guihan Wu, Haijiang Cao, Minfeng Jin, Xin Zhou, Qiuyang Jiang, Wei Jiang</i>	
Wasserstein Autoencoder Based End-To-End Learning Strategy of Geometric Shaping for an OAM Mode Division Multiplexing IM/DD Transmission .....	610
<i>Zhaohui Cheng, Ran Gao, Qi Xu, Fei Wang, Yi Cui, Xiangjun Xin</i>	
Compensation of Multi-Channel Mismatches in OADC Based on MMI-Based Phase-Shift Quantization .....	613
<i>Yiding Zhao, Jifang Qiu, Bowen Zhang, Yan Li, Jian Wu</i>	
Baud-Rate and IQ Skew Tolerant Timing Recovery Scheme for Short-Reach Coherent Optical Interconnet.....	618
<i>Siyu Gong, Yanfu Yang, Qian Xiang, Jianhua Liu, Qun Zhang, Tianjian Zuo</i>	
Hybrid Probabilistic and Geometric Constellation Shaping for Phase Noise Channels with an Improved Differentiable Blind Phase Search .....	622
<i>Zhiyang Liu, Xiaoyu Liu, Shilin Xiao, Weiyang Yang, Weisheng Hu</i>	
Side-Peak Suppression in the Microwave Frequency Comb Using an Optical Injected Semiconductor Laser with Optoelectronic Feedback .....	625
<i>Wei Chen, Chenpeng Xue, Zuxing Zhang</i>	
Narrow Linewidth Measurement Based on Adaptive Extended Kalman Filter Algorithm .....	629
<i>Xiaoyu Zhang, Yangan Zhang, Xueguang Yuan</i>	
On Propagation of OAM Modes Carried by Partially Coherent Laguerre-Gaussian Beams in Weak Oceanic Turbulence with Wide Range Parameters.....	632
<i>Weijie Dai, Yuxuan Liao, Yize Zhang, Yuhang Dong</i>	
Longitudinal Mode Broadening in Multi-Wavelength Raman Fiber Laser .....	637
<i>Yanxin Li, Jiancheng Deng, Ming Shen, Zuowei Xu, Xuewen Shu</i>	
Design and Simulation of Highly Efficient Chirped Blazed Grating Coupler Based on Thin-Film Lithium Niobate .....	640
<i>Min Liu, Binhang Xu, Guangshuai Meng, Jing Du, Junqiang Sun, Jian Wang</i>	
Routing and Spectrum Assignment in Spatial Channel Network-Based Inter-Datacenter Networks.....	643
<i>Weichang Zheng, Yu Zheng, Mingcong Yang, Kun Yang</i>	
Dual-Mode Spatial Division Multiplexing with Geometric Constellation Shaping for UVLC.....	647
<i>Jiwei Wang, Chen Chen, Bohua Deng, Min Liu, Cuiwei He, H. Y. Fu</i>	
Performance Analysis of Adaptive Optics in Turbulence Compensation with WFS for Synthetic Aperture Lidar Imaging .....	651
<i>Chao Chen, Yan Li, Hongxu Song, Xiaobin Hong, Hongxiang Guo, Jian Wu</i>	
Ultra-Wide and Ultra-Compact Spot Size Converter Based on Dielectric Metasurfaces .....	656
<i>Desheng Zeng, Qingzhong Huang</i>	
A Load Balancing and Time-Frequency Fragmentation-Aware Algorithm for Elastic Optical Network .....	660
<i>Mingxuan Yu, Jing Jiang, Tao Shang, Junfeng Zhai, Haotian Liang, Makoto Tsubokawa</i>	

Continuous- Variable Quantum Key Distribution with Practical Unbalanced Heterodyne Detection.....	665
<i>Jiale Mi, Yiming Bian, Lu Fan, Yichen Zhang, Song Yu</i>	
A Broadband Metalens Exhibiting Superior Focusing Efficiency and Polarization Insensitivity .....	668
<i>Junjing Huang, Xiaofeng Duan, Kai Liu, Yongqing Huang, Xiaomin Ren</i>	
A Low-Complexity Adaptive Equalizer for Field PDM-PAM4 with Coherent Detection .....	672
<i>Yuyuan Gao, Xian Zhou, Shiyao Wang, Qianwen Fang</i>	
Coupling Light into a Hollow-Core Fiber with Mitigated Excitation of Higher-Order Modes.....	676
<i>Ailing Zhong, Eric Numkam Fokoua, Stanislav Zvánovec, Francesco Poletti, Radan Slavík, Matej Komanec</i>	
Adaptive Dynamic Virtual Network Function Placement in Mega LEO Satellite Optical Networks .....	679
<i>Wenchao Zhang, Ruijie Zhu, Yudong Zhang, Zhichao Yang, Huiying Sang, Chao Xi, Bo Yang</i>	
Accurate and Efficient Optical Fiber WDM Transmission Modeling Using the Encoder-Only Transformer with Feature Decoupling Distributed Method .....	684
<i>Minghui Shi, Hang Yang, Zekun Niu, Chuyan Zeng, Shilin Xiao, Weisheng Hu, Lilin Yi</i>	
Exceptionally Efficient Second-Harmonic Generation in a Double-Layer Thin-Film Lithium Niobate Waveguide.....	689
<i>Yuan Li, Lutong Cai, Lin Zhang</i>	
Open Set Hardware Fingerprint Authentication of Optical Transmitters in Fiber Networks.....	693
<i>Yilin Qiu, Jiawei Ren, Zhi Chai, Xinran Huang, Renhui Huang, Xuelin Yang</i>	
Passband-Controlled Cascaded Microwave Photonic Filter Based on Reflective Fiber Mach-Zehnder Interferometer.....	698
<i>Tao Wu, Qiqi Hu, Enming Xu, Zuxing Zhang</i>	
Real-Time FPGA Implementation of CNN-Based Distributed Fiber Optic Vibration Event Recognition Method .....	701
<i>Zhongyao Luo, Zhao Ge, Hao Wu, Ming Tang</i>	
Measurement of Chromatic Dispersion in Hollow Core Fibers Using Optical Frequency Comb.....	706
<i>Meng Ding, Daniel Dousek, Ailing Zhong, Matej Komanec, Ian Davidson, Gregory Jasion, Francesco Poletti, Radan Slavík</i>	
A Fast Silicon Polarization Scrambling Device Utilizing Novel Thermal Tuning Scheme.....	709
<i>Weiqin Wang, Ziwen Zhou, Yifan Zeng, Yining Sun, Hao Wu, Siqi Yan, Ming Tang</i>	
Photonic-Assisted Compressive Sensing with Dispersion Fiber .....	712
<i>Chunyu Che, Jiasi Yang, Jiazen Cai, Yufei Fu, Xinlu Gao, Shanguo Huang</i>	
Angular Response Improvement of a Fabry-Perot Tunable Filter for Infrared Multispectral Imaging .....	717
<i>Can Chen, Chenlong Yang, Jiajun Zhou, Jianjun Lai</i>	
High Sensitivity Surrounding Refractive Index Sensor Based on Helical Long-Period Fiber Gratings Inscribed in Tapered Double-Cladding Fiber.....	722
<i>Yanping He, Yuehui Ma, Chen Jiang, Peng Wei, Yunqi Liu</i>	
PAM4 Symbol Recognition Based on Spiking Neural Network for 200Gb/s On-Chip IM/DD Optical Interconnection .....	725
<i>Te Ke, Ying Zhu, Chao Yang, Xiao Hu, Dingyi Wu, Ming Luo, Xiao Xi</i>	

A Noise Performance Optimization Method for SBS-Based Optical Spectrum Analyzer .....	729
<i>Zi Liang, Changjian Ke, Yuming Zhang, Yanjun Lv, Deming Liu</i>	
Photonic-Assisted Multifunctional Radar for Simultaneous Measurement of Distance, Direction and Velocity .....	732
<i>Yan Li, Muguang Wang, Yuxiao Guo, Jian Wang, Bin Yin, Beilei Wu</i>	
Joint Multi-Layer Routing and Resource Allocation in QKD-Embedded IP Over Optical Networks.....	737
<i>Kaili Zhang, Xaosong Yu, Yongli Zhao</i>	
Wide Bandwidth Wavelength Combination for 50G-PON Through Adiabatic 3-DB Coupler Based on Asymmetric MZI .....	740
<i>Panpan Yu, Guojiong Li, Yuheng Pan, Liyuan Song, Juan Xia, Jieru Zhao, Yongqian Tang, Qiaoyin Lu, Weihua Guo</i>	
Error Vector Magnitude Optimization in Phase-Stabilized Transmission System for Vector Signals Without Precoding.....	743
<i>Tao Wang, Cheng Gu, Shangyuan Li, Jinyang Liu, Zhengyang Xie, Xin Zhao, Zheng Zheng</i>	
A Gas Pressure Sensor Based on Optical Fiber Fabry-Perot Interference .....	746
<i>Yuxin Li, Weimin Lyu, Yujian Li, Qing Wang, Xiuyuan Wang, Weihao Yuan, Changyuan Yu</i>	
Multi-Level Decomposition Enumerative Sphere Shaping Scheme for Short Blocklengths .....	749
<i>Xuezhen Wang, Lishan Yang, Chenglin Bai, Hengying Xu, Danping Pan, Weibin Sun, Yining Zhang, Zukai Sun, Pengfei Li</i>	
Awakening Intrinsic Distributed Acoustic Sensing in Digital Subcarrier Multiplexing Coherent Transmission Systems .....	754
<i>Zihe Hu, Can Zhao, Mingming Zhang, Yuqi Li, Weihao Li, Junda Chen, Yuxuan Xiong, Luming Zhao, Ming Tang</i>	
Suppression for Laser Phase Noise in Phase-Stabilized Transmission System Based on Phase Conjugation .....	757
<i>Tao Wang, Chen Tian, Shangyuan Li, Jinyang Liu, Zhengyang Xie, Xin Zhao, Zheng Zheng</i>	
High Performance Adiabatic Polarization Rotator-Combiner Based on Thin-Film Lithium Niobate Platform.....	760
<i>Panpan Yu, Yuheng Pan, Yongqian Tang, Xiangyang Dai, Juan Xia, Jieru Zhao, Guojiong Li, Qiaoyin Lu, Weihua Guo</i>	
Robust All-Polarization-Maintaining Linear-Cavity Mode-Locked Tm-Doped Fiber Laser .....	763
<i>Siwei Peng, Xuanyi Liu, H. Y. Fu, Qian Li</i>	
Transmission Link OSNR Monitoring Based on Data-Aided Carriers .....	766
<i>Hao Zhang, Xinhang Zou, Wanqi Zhao, Zhennan Zheng, Xinlu Gao, Shanguo Huang</i>	
PON Monitoring Based on Dual-FBG Periodic Encoders and Sequence Correlation .....	769
<i>Zhiyi Zhong, Wu Liu, Hong Li, Han Li, Ming Luo</i>	
7.12-Gbps Visible Light Communication Link Utilizing InGaN/GaN Micro-LED-Based Photodetector.....	773
<i>Yue Liao, Xinyi Shan, Pengfei Tian</i>	
Vertical Impedance-Matched Photodetectors for High-Power Applications .....	776
<i>Tianlang Yang, Xiangyang Dai, Weihua Guo, Qiaoyin Lu</i>	

Non-Volatile Tunable Optical Power Splitter Based on the Hybrid Integration of the Planar Lightwave Circuits and the Phase Change Material.....	780
<i>Wenyi Peng, Siqi Yan, Hao Tong, Qingshan Tan, Ming Tang</i>	
Modeling of Multi-Core Fiber Channel Based on M-CGAN for High Capacity Fiber Optical Communication .....	784
<i>Ming Ma, Huan Chang, Ran Gao, Dong Guo, Xinyu Liu, Mengzhu Yuan</i>	
Experiment Demonstration of OFDM-Based VLC Systems with Low-Resolution DAC.....	789
<i>Siyu Bai, Yibin Li, Zixian Wei, Chen Cheng, Yanfu Yang, H. Y. Fu</i>	
ACO-OTFS and ADO-OTFS for Indoor Relay-Assisted Visible Light Communication.....	793
<i>Jianhua Pei, Yuxuan Liao, Rui Wang, Jian Song, Yuhan Dong</i>	
Efficiency Tunable All-Optical Controlled Coupled-Mode Induced Transparency in a Microsphere Resonator.....	798
<i>Weichen Yuan, Zhenmin Chen, H. Y. Fu</i>	
A Crosstalk-Minimized Wavelength Conflict Avoiding Algorithm for Optical Switching in Quantum - Key-Distribution Optical Networks.....	801
<i>Yufei Guo, Xiaosong Yu, Yongli Zhao</i>	
Adaptively Biased Optical OTFS for Power-Constrained Visible Light Communication.....	805
<i>Jianhua Pei, Yuxuan Liao, Rui Wang, Jian Song, Yuhan Dong</i>	
High-Fidelity Positive Real Matrix Transformation with Coherent Integrated Photonics Chip.....	810
<i>Guangsong Yuan, Hongxiang Guo, Yuepeng Wu, Guo Yi, Shunxin Song, Jian Wu</i>	
DP-16QAM and DP-QPSK Coherent Links for 1.6Tb/s in O-Band .....	814
<i>Chaonan Yao, Yanjun Zhu, Hua Zhang</i>	
Robust Polar Coordinate System-Based KNN Algorithm Suitable for FSO Communication Systems with Turbulence Distortions .....	817
<i>Xishuo Wang, Kai Lv, Xiaolong Pan, Qi Zhang, Xiangjun Xin, Xiaoli Huo, Ruiquan Jing</i>	
Modified Dual Depletion Region Photodiode with Optimized Collection Layer.....	822
<i>Xinyue Li, Xiaofeng Duan, Jihong Ye, Yongqing Huang, Kai Liu, Xiaomin Ren</i>	
Driverless 400-Gbps/ $\lambda$ PS-PAM16 Transmission Using Packaged 60-GHz Thin-Film LiNbO <sub>3</sub> Modulator with 16-FJ/bit Energy Efficiency .....	827
<i>Shangcheng Wang, Yu Yang, Zhaopeng Xu, Lulu Liu, Gang Qiao, Honglin Ji, Jinlong Wei, Zhixue He, Weisheng Hu</i>	
Mixed Channel Traffic Grooming in an SBPP-Based IP Over MCF-EON with Minimized Inter-Core Crosstalk .....	831
<i>Fengxian Tang, Sunan Wang, Gangxiang Shen</i>	
Impact of WDM-Band Drop on S+C+L Multi-Band Optical Transmission Systems .....	834
<i>Xiaohui Zhao, Salma Escobar-Landero, Abel Lorences-Riesgo, Dylan Le Gac, Loig Godard, Iosif Demirtzioglou, Hartmut Hafermann, Qiang Guo, Romain Brenot, Massimo Tornatore, Yann Frignac, Gabriel Charlet</i>	
Optical Properties of Active Fibers with Nanostructured Cores.....	839
<i>Ryszard Buczynski, Jan Aubrecht, Dariusz Pysz, Ivo Barton, Marcin Franczyk, Michal Kamrádek, Adam Filipkowski, Ivan Kasik, Pavel Peterka</i>	

Photonic Crystals Nanohole Array-Based Silicon TM-Pass Polarizer for 1550/2000 nm Wavebands.....	842
<i>Guanglian Cheng, Qiyuan Yi, Zengfan Shen, Zhiwei Yan, Qiyuan Li, Li Shen</i>	
Field Trial of Privacy-Preserving Resource Allocation in Multi-Domain Optical Networks Based on Federated Reinforcement Learning .....	845
<i>Xiaoya Zhang, Rentao Gu, Jiangshan Dong, Jiyan Chen, Weijing Sang, Chuang She</i>	
Side-Amorphous-Silicon-Grating InGaAs/GaAs Nano-Ridge Distributed Feedback Laser Monolithically Grown on 300 mm Silicon Substrate .....	849
<i>Zhongtao Ouyang, Eslam Fahmy, Davide Colucci, Andualem Ali Yimam, Bernardette Kunert, Dries Van Thourhout</i>	
Ultrafast Pulse Management with Hyperbolic Metamaterials .....	852
<i>Jingyi Wu, Jack Kingsley-Smith, Anton Yu. Bykov, Alexey V. Krasavin, Francisco J. Rodríguez-Fortuño, Anatoly V. Zayats</i>	
Automatic Bias Control for PPM-Based Free Space Optical Communication Systems .....	855
<i>Chenchen Ding, Yang Sun, Ziyuan Shi, Xiaowei Wu, Lei Yang</i>	
Reconfigurable Topology Design with Deep Reinforcement Learning in Satellite Optical Network .....	860
<i>Yun Xiao, Bingli Guo, Hai Yang, Kuan Yan, Shanguo Huang</i>	
Phase Noise Induced Interference for Coherently-Detected OTDR Systems.....	863
<i>Zexu Liu, Weiqi Lu, Lei Liu, William Shieh</i>	
Constructive Pyridine Molecular Configurations for Defect Passivation of Printable Perovskite Solar Cells .....	866
<i>Yue Ming, Weiqiang Wu, Jiale Liu, Jian Yang</i>	
Optoelectronic Oscillator Based on Directly Modulated Microcavity Laser Under Optical Injection.....	869
<i>Hang-Dong Wei, Yang Shi, Yue-De Yang, Jin-Long Xiao, Yong-Zhen Huang</i>	
Complete Photonic Tensor Convolution Driven by Single Dataflow .....	872
<i>Kaifei Tang, Jiantao Wang, Xiang Ji, Jiahui Liu, Yu Xin, Haijiang Cao, Zhaobang Zeng, Rulei Xiao, Wei Jiang</i>	
Partial Response Signaling Enabled 320/150 GBd OOK/PAM4 Transmission Using a 65 GHz TFLN Modulator for Short-Reach Optical Interconnects.....	875
<i>Lulu Liu, Honglin Ji, Yu Yang, Zhaopeng Xu, Shangcheng Wang, Gang Qiao, Qi Wu, Junpeng Liang, Jinlong Wei, Jiali Li, Zhixue He, Weisheng Hu</i>	
Low-Complexity Sequence Detection for Optical Fiber Transmissions with Correlated Multi-Symbol Modulation .....	879
<i>Hansheng Xu, Zhongxing Tian, Kaisheng Zhang, Chao Zhang, Ji Huang, Chenxu Jiang, Huan Huang, Xiaoling Wang, Lin Sun, Gordon Ning Liu, Yi Cai</i>	
Ultralow-Loss Arc-Discharge Fusion Splicing Between Antiresonant Hollow-Core Fibers.....	883
<i>Cong Zhang, Peng Li, Yue Wang, Di Lin, Lei Zhang, Jie Luo, Meng Xiang, Yuwen Qin, Songnian Fu</i>	
Shaping Distribution Identification of Probabilistic Shaping QAM Signals Based on Higher-Order Cumulants.....	886
<i>Hongye Li, Zhou Gan, Yuxuan Liao, Xinke Tang, Yuhua Dong</i>	
Multi-Point Optical Vector Analyzer Based on Optical Linear Frequency-Modulated Waveform and Kramers-Kronig Receiver .....	889
<i>Yaowen Zhang, Lingjie Zhang, Zhen Zeng, Zhiyao Zhang, Yong Liu</i>	

Low-Complexity Channel Prediction Based on Retroreflection of Auxiliary Beam and Deep Learning for Free-Space Optical Communication Systems.....	893
Hengrui Liu, Shanyong Cai, Liqian Wang, Yan Chen, Zhiguo Zhang	
Novel Dual-Axis Accelerometer Designs Using Cavity Optomechanics: Analysis and Simulation .....	898
Chuanwang Fang, Jiahui Liang, Zijiang Liao, Jing He, Ruoyu Li, Yongjun Huang	
PLC Splitter Encoded with Waveguide Bragg Grating by Femtosecond Laser Inscribing Technique for PON Monitoring .....	903
Jin Hu, Xu Liu, Lin Ma, Heyuan Li, Zuyuan He	
Advanced Recursive Algorithm Based Electronic Polarization Tracking for PDM-DQPSK Differential Detection Optical Transmission Systems.....	905
Zhongxing Tian, Chenxu Jiang, Xudong Chai, Xiaozhou Wang, Huan Huang, Jun Zhou, Yi Cai	
Femtosecond Laser Inscribed POF Bragg Grating for Flexible and Wearable Sensing Applications .....	909
Liuyu Jia, Hao Jiang, Lin Ma, Zuyuan He	
Intelligent Intra- And Inter-Channel Nonlinearity Compensation for Terabit-Per-Lambda 16QAM Long-Haul Transmission .....	911
Xiansong Fang, Lingjun Zhou, Yixiao Zhu, Jiayu Zheng, Xiang Cai, Fan Zhang	
Non-Volatile Photonic Synapse with Ultra-Low Insertion Loss for Deep Neural Network .....	916
Zhiqiang Quan, Xiaoxiao Ma, Yuanjian Wan, Jian Wang	
Innovative Fusion of Multimode Fiber and Multicore Fiber for High-Precision Non-Contact Displacement Measurement .....	921
Zheng Gao, Ting Jiang, Jing Liu, Huan He, Fengming Zhang, Ming Tang	
A Low-Complexity Neural Network Equalizer Based on Symbol Classification for VLC System .....	924
Shupeng Li, Yi Zou	
Optical Power Ring Model for Coupling Efficiency Estimation in VCSEL-MMF Links.....	927
Yuzhong Ma, Gordon Ning Liu, Xin Chen, Jason E. Hurley, Hao Dong, Hao Chen, Ming-Jun Li	
Research on Routing and Spectrum Allocation Algorithm in C+L Band Elastic Optical Networks .....	931
Lingfei Shen, Nan Feng, Yunxuan Liu, Dan Yan, Shihao Fan, Jijun Zhao	
A Method of Generating Second-Order Soliton with Specified Time Positions .....	935
Chuang Xu, Alan Pak-Tao Lau	
A Computational Algorithm for Design of Dual-Etched Grating Couplers on 220-Nm SOI Platform .....	938
Lihang Wang, Jifang Qiu, Lan Wu, Yuchen Chen, Hongxiang Guo, Jian Wu	
Deep Reinforcement Learning Based on Optical Neural Networks in Path Planning .....	941
Zhiwei Yang, Yihang Lai, Jian Dai, Tian Zhang, Kun Xu	
Spatio-Temporal Routing Based on Sun Outage Prediction in Deterministic Satellite Optical Networks .....	945
Yating Wei, Ruijie Zhu, Yudong Zhang, Wenchao Zhang, Qiancheng Zhao, Zhichun Sun, Xiaojie Hou, Zhichao Yang, Huiying Sang, Mengzhen Liu, Kai Li, Aman Wang, Chao Xi, Bo Yang	
Impact of Non-Vertical Sidewalls on Bandgap Characteristics of LiNbO <sub>3</sub> Photonic Crystals .....	948
Peyman Bagheri, Xiaoyan Zhou, Lin Zhang	

High Linearity InAs/GaAs Quantum Dot Distributed Feedback Lasers .....	953
<i>Minghao Cai, Zhengqing Ding, Kun Zhan, Ying Yu, Siyuan Yu</i>	
Inverse-Designed Two-Dimensional Grating Coupler with Low Polarization-Dependent Loss .....	955
<i>Renyou Ge, Shengqian Gao, Meiyuan Wu, Ping Chen, Bigeng Chen, Yannong Luo</i>	
DSP-Free Demultiplexing for DP-QPSK Reception in Frequency Synchronous Optical Networks .....	959
<i>Lei Liu, Puzhen Yuan, Weiqi Lu, Yuhao Fang, Zexu Liu, Qi Yang, William Shieh</i>	
Investigation of a Subwavelength Grating Bimodal Interferometric Sensor Built on Silicon Nitride Platform.....	962
<i>Wenyu Liao, Yiqiang Chen, Linghua Wang</i>	
A Compact AR - HUD System Based on 1- D Pupil Expansion Diffractive Waveguide.....	966
<i>Han Yang, Gaoyu Dai, Kailin Ren, Luqiao Yin, Jianhua Zhang</i>	
Femtosecond Laser Plane-By-Plane Inscription of High-Quality Fiber Bragg Gratings.....	969
<i>Jiafeng Wu, Jun He, Xizhen Xu, Shen Liu, Changrui Liao, Yiping Wang</i>	
Delay-Energy-Aware Dependent Task Offloading Based on Orchard Algorithm in Collaborative Cloud-Edge Optical Networks.....	972
<i>Shuyao Wang, Shan Yin, Shangguo Huang</i>	
CNN Based Input Power Optimization for S, C and L Wide-Band Transmission Systems .....	977
<i>Han Li, Wu Liu, Hong Li, Zhiyi Zhong, Ming Luo</i>	
Synergistic Resource Allocation in Space Division Multiplexed Data Center Optical Networks Secured with Quantum Key Distribution .....	981
<i>Xueqin Ren, Yongmei Sun, Chuan Xie, Dengqi Liu</i>	
Investigation of Collimation and Polarization Characteristics of Multimode VCSEL Based on Metasurface Optoelectronic Integration .....	986
<i>Pan Fu, Xiaorui Zhao, Bo Wu, Yiyang Xie</i>	
High Accuracy Curve Reconstruction Based on Twisted Multicore Fiber and Twist Bias Calibration.....	989
<i>Keyuan Yang, Zhiyuan Gui, Changjian Ke, Zikang Xu, Deming Liu</i>	
All-Fiber LP Mode Converter Based on Cascaded Long-Period Fiber Gratings in the Elliptical Ring Core Fiber.....	992
<i>Ziwen Bai, Hu Zhang, Jiaqi Wang, Xiaoguang Zhang, Lixia Xi</i>	
Design of 1550 nm High-Power Single-Mode DBR Laser Diodes .....	995
<i>Qianru Lu, Yuanhao Zhang, Minwen Xiang, Can Liu, Qiaoyin Lu, Weihua Guo</i>	
A Deep Neural Network-Based Split-Step Decoding Algorithm in Optical Spatial Modulation System .....	998
<i>Minghua Cao, Xiangwen Ye, Yue Zhang, Ruifang Yao, Zhihao Li, Huiqin Wang</i>	
DEER: Deadline-Driven and Contention-Free Central Arbitration in AWGR-Based Optical Datacenter Networks .....	1003
<i>Shi Feng, Jiawei Zhang, Bitao Pan, Yongcheng Li, Gangxiang Shen, Yuefeng Ji</i>	
Quasi-Distributed Relative Humidity Sensing Based on Optical FMCW Multiplexed Fabry-Perot Interferometer.....	1007
<i>Zhiyu Feng, Chaotan Sima, Yu Cheng, Yi Tang, Zhipeng Wang, Yu Pan, Libo Yuan</i>	

12.5Gb/s Visible Light Communication Over 100m Free-Space Transmission Utilizing Geometric Constellation Shaping and Reservoir Computing.....	1010
<i>Yuning Zhou, Zhilan Lu, Fujie Li, Jifan Cai, Zengyi Xu, Junwen Zhang, Chao Shen, Nan Chi</i>	
250m Daytime Real-Time LED-OWC System .....	1015
<i>Shulei Wang, Yuanzhe Qu, Jian Chen, Zongbi Yu, Yanhao Chen, Yongchun Yuan, Shidong Yuan, Qianwu Zhang, Junjie Zhang</i>	
When Electronic Spine-Leaf Meets Optical Torus: A Hybrid Optical-Electronic Data Center Network.....	1018
<i>Dawei Yu, Weidong Shao, Gangxiang Shen</i>	
A -70 dBm High-Sensitivity AGC Algorithm for PPM-APD Low-Power FSOC Systems.....	1022
<i>Yi'Nan Li, Jiaji Chen, Xiaowei Wu, Lei Yang</i>	
Continuous THz-Wave Generation Using Antenna-Integrated MUTC-PD and DFB Laser Array .....	1027
<i>Chaodan Chi, Yingfei Wan, Yiti Xiong, Yili Liu, Zhangwan Peng, Hao Wang, Dan Lu, Kun Yin, Chen Ji</i>	
Continuous-Wave Terahertz Mode-Beating Signal Generation Based on High-Power Multi-Wavelength DFB Semiconductor Laser Array .....	1030
<i>Yingfei Wan, Chaodan Chi, Yiti Xiong, Yili Liu, Wanshu Xiong, Kun Yin, Hao Wang, Dan Lu, Chen Ji</i>	
Impact of Gamma- Ray Radiation on High Speed Silicon Optical Modulators .....	1033
<i>Nengyang Zhao, Longsheng Wu, Chao Qiu, Dawei Bi, Yanyue Ding, Enxia Zhang, Aimin Wu</i>	
Demostration of Resource-Efficient and Load-Balanced Network Slicing in Computing Power Optical Networks.....	1036
<i>Yongjian Wu, Bojun Zhang, Shaoxiong Feng, Chaoqun Li, Yuqing Song, Zhiqun Gu, Jiawei Zhang, Yuefeng Ji</i>	
Waveguide Ge/Si Avalanche Photodetector with Ultra-High Gain-Bandwidth Product of 1440GHz.....	1040
<i>Hengzhen Cao, Yuluan Xiang, Weichao Sun, Jin Xie, Jingshu Guo, Daoxin Dai</i>	
Net 8×250 Gbit/s/λ PAM6/8 Optical Interconnect Over High-Density Eight-Core Fiber and Low-Crosstalk Laser Direct Writing FI/FO Devices.....	1043
<i>Yu Yang, Zhaopeng Xu, Honglin Ji, Gang Qiao, Lulu Liu, Shangcheng Wang, Ruiting Cheng, Jinyi Yu, Chuanchuan Yang, Zhixue He, Yongqi He, Zhangyuan Chen, Weisheng Hu, Juhao Li</i>	
An Indoor P2MP Narrow Beam Optical Wireless Communication (NB-OWC) System for Cloud Office Application .....	1047
<i>Shan Zhang, Junwei Li, Jun Li, Xiaodi You, Gangxiang Shen, Qiang Cheng</i>	
Photonic Chip Set for Terahertz Frequency 45 Gb/s Data Transmission.....	1050
<i>Yiti Xiong, Yingfei Wan, Chaodan Chi, Yili Liu, Yanhui Shi, Kun Yin, Hao Wang, Dan Lu, Chen Ji</i>	
Microwave Sensing and Localization with Solid-State Spins .....	1053
<i>Xiang-Dong Chen, Fang-Wen Sun</i>	
PSO-Algorithm-Controlled Optimized Optical Equalizer for Bandwidth-Limited Transmitter and Receiver in Short-Reach PAM-4 Data Center Interconnects.....	1056
<i>Guofeng Yan, Yuanjian Wan, Min Yang, Lei Zhou, Rui Li, Minghui Tao, Jian Wang</i>	

Ultra-Sensitive Fiber Fabry-Perot Temperature Sensor Based on 3D Nano-Printed Air Cavity and Vernier Effect.....	1059
<i>Zhen Li, Wei Xu, Enqing Chen, Mian Wu, Ying Qiu, Jingjing Zheng, Chunmin Sheng, Jie Yan, Jin Tao</i>	
22.5 Gbps UOWC Using WDM/PolM and OFDM with Interleaved Subcarrier Number Modulation.....	1062
<i>Jiamin Chen, Bohua Deng, Chen Chen, H. Y. Fu</i>	
Weakly-Guiding and Weakly-Coupling Ring-Core Fiber with 8 Fully Lifted Mode Groups for Orbital Angular Momentum Mode Space-Division Multiplexing.....	1066
<i>Xi Zhang, Jun Liu, Jian Wang</i>	
A Beam-Scannable Photonic THz-ISAC System Based on Risley Prisms.....	1069
<i>Zhidong Lyu, Lu Zhang, Hongqi Zhang, Zuomin Yang, Hang Yang, Changming Zhang, Vjaceslavs Bobrovs, Xiaodan Pang, Oskars Ozolins, Xianbin Yu</i>	
On the PMD Impact of Dual-Polarization Direct Detection with Jones-Space Optical Field Recovery.....	1073
<i>Qi Wu, Yixiao Zhu, Hexun Jiang, Zhaopeng Xu, Honglin Ji, Yu Yang, Gang Qiao, Shangcheng Wang, Lulu Liu, Junpeng Liang, Jinlong Wei, Jiali Li, Zhixue He, Qunbi Zhuge, Weisheng Hu</i>	
Low Latency and Resource Consumption Phase Recovery for Real-Time Inter-Satellite QPSK Optical Communications .....	1077
<i>Yanhao Chen, Yuanzhe Qu, Junjie Zhang, Lewei Gong, Qianwu Zhang, Yingxiong Song</i>	
High-Flat-Gain and $\mathrm{C}+\mathrm{L}$ Band Distributed Raman Amplifier Applied in 3 Mode-Group-Division Multiplexing and WDM Long-Haul MIMO-Free Transmission Over 104-Km Ring-Core Fiber.....	1080
<i>Yuchen Zhang, Xi Zhang, Guofeng Yan, Min Yang, Mutian Xu, Jun Liu, Jian Wang</i>	
Enhanced Transmission Rate and Reach for POF-Based VLC System with Probabilistic Shaping PAM-8 .....	1083
<i>Yibin Li, Zixian Wei, Bohua Deng, H. Y. Fu</i>	
Efficient On-Chip Training of Optical Processor Using Stochastic Parallel-Gradient-Descent Algorithm .....	1087
<i>Yuanjian Wan, Xudong Liu, Guangze Wu, Yu Zhang, Jian Wang</i>	
On-Chip Pulse Self-Compression to Single-Cycle Level in Silicon-Rich Nitride Waveguides .....	1090
<i>Yuke Zhai, Lijuan Xu, Kexin Ren, Lin Zhang</i>	
Low Hardware-Complexity 100G Transceiver Using a Single DAC and Two ADCs .....	1095
<i>Abel Lorences-Riesgo, Yu Zhao, Yann Frignac, Gabriel Charlet</i>	
Cascadable Integrated Optical Tweezers by Crossing MMI Waveguides .....	1100
<i>Xuedi Wang, Xin Tong, Weichao Cheng, Lin Zhang</i>	
Mid-Infrared Supercontinuum Generation in a Cascaded Silicon Ridge Waveguide by a Low-Energy Picosecond Pulse.....	1105
<i>You Wu, Jiajia Zhao, Qian Li</i>	
Single- $\lambda$ 3-Tb/s (8 SDM $\times$ 120 Gbd) Probabilistically-Shaped-PAM16 Optical Interconnections Over Standard 125 $\mu$ m-Cladding MCF Using Linear Equalizer Only .....	1107
<i>Yu Yang, Zhaopeng Xu, Honglin Ji, Gang Qiao, Qi Wu, Lulu Liu, Shangcheng Wang, Ruiting Cheng, Jinyi Yu, Chuanchuan Yang, Zhixue He, Yongqi He, Zhangyuan Chen, Weisheng Hu, Juhao Li</i>	

Exploring the Neural Organoid in High Definition: Physics-Inspired High-Throughout Super-Resolution 3D Image Reconstruction .....	1111
<i>Yuanzheng Ma, Davit Khutsishvili, Zitian Wang, Xun Guan, Shaohua Ma</i>	
Computing Power Slicing Strategy Based on Deep Reinforcement Learning Under the Constraint of Services Intention .....	1116
<i>Zhengjie Sun, Hui Yang, Qiuayan Yao, Jie Zhang, Sheng Liu, Dong Wang</i>	
Analysis of the Singularity Avoidance Capability of Constant Modulus Algorithms in Coherent Optical Fibre Communication Systems .....	1119
<i>Peter Akachi Nwakamma, Gwillerm Froc, Yves Jaouën, Cédric Ware</i>	
Flexible and High-Fidelity Concurrent Dual-Band Delta-Sigma Modulator for Diverse Applications Convergence .....	1124
<i>Zijun Yan, Yixiao Zhu, Yikun Zhang, Yimin Hu, Gengming Lin, Qi Wu, Ziyu Cheng, Weisheng Hu</i>	
Q-Switched Harmonic Mode-Locked Noise-Like Pulses with a Repetition Rate of 26.79 MHz in an Erbium-Doped Fiber Laser .....	1129
<i>Chuangkai Li, Xiaoqiang Ban, Minghe Zhao, Feng Ye, H. Y. Fu, Qian Li</i>	
Low Differential Modal Gain Trench-Assisted Ring-Core Erbium-Doped Fiber Amplifier Supporting 14 Orbital Angular Momentum Modes .....	1132
<i>Jiaqi Wang, Hu Zhang, Haixia Feng, Cheng Du, Wei Li, Jing Yang, He Wen, Xiaoguang Zhang, Lixia Xi</i>	
Millimeter Wave Generation Based on Photodetector Nonlinearity .....	1135
<i>Mingxi Yang, Yongqing Huang, Jihong Ye, Xiaofeng Duan, Kai Liu, Xiaomin Ren</i>	
A Protection Scheme Based on Multi-Granularity Connection Resource Sharing in Optical Networks .....	1139
<i>Wenhong Liu, Hongzhen Yang, Jiangsheng Li, Yufei Shi, Zhuotong Li, Yongli Zhao</i>	
3D Printed Microlens Probe for Optical Coherence Tomography .....	1143
<i>Yalong Tai, Zhuorong Li, Dejun Liu, Bozhe Li, Rui Zhu, Jianan Li, Qiang Li, Haiping Liu, Changrui Liao, Yiping Wang</i>	
Magneto-Refractive Effect and Sensing Characteristics of Erbium-Doped Silica Fiber .....	1146
<i>Caihong Huang, Wanyue Wang, Qifan Wu, Mei Chen, Yanhua Dong, Yi Huang, Tingyun Wang</i>	
High-Temperature Pressure Sensor Based on a Highly Birefringent Fiber Bragg Grating Created in a Dual Side-Hole Fiber .....	1149
<i>Baijie Xu, Jun He, Xizhen Xu, Bin Du, Shen Liu, Changrui Liao, Yiping Wang</i>	
A Laser-To-Chip Edge Coupling Scheme Based on Novel Dual Lens .....	1152
<i>Yili Liu, Tian Chai, Chaodan Chi, Yingfei Wan, Yiti Xiong, Shuo Liu, Wanshu Xiong, Kun Yin, Chen Ji</i>	
An Image-Free Location Method Using Photonic Integrated Interferometric System .....	1155
<i>Xiaohan Song, Yong Zuo, Yuhao Wang, Xiaobin Hong, Jian Wu</i>	
Neural Hierarchical Network Based Channel Emulator for IM/DD OAM Mode Division Multiplexing Optical Fiber Communication System .....	1159
<i>Fulin Yang, Ran Gao, Qi Xu, Fei Wang, Qi Zhang, Xiangjun Xin</i>	

Transfer Learning Based Programmable Raman Amplifier for Flexible Multi-Band Optical Network.....	1162
<i>Yuejiao Liu, Rentao Gu, Xiaoxuan Gao, Lin Bai</i>	
Joint Resources Allocation for Asynchronous Distributed Training in Cloud-Edge Collaborative Optical Networks.....	1165
<i>Xiaodong Liu, Yutong Chai, Zheng Duan, Zhidong Zhang, Shan Yin, Shanguo Huang</i>	
Wide Measurement Range Vector Curvature Sensor Based on Single Stress Applying Fiber .....	1170
<i>Jiaqi Cao, Shuqin Lou, Xin Wang</i>	
Pilot-Aided Deep Learning Based Phase Estimation for OFDM Systems with Wiener Phase Noise .....	1172
<i>Qian Wang, Xingke Chen, Liping Qian, Xinwei Du, Changyuan Yu, Pooi-Yuen Kam</i>	
High Resolution Millihertz Fibre-Optic Strain Sensor Based on Time Delay Interferometry.....	1177
<i>Ke Ai, Cunzheng Fan, Junfeng Chen, Hao Li, Zhijun Yan, Qizhen Sun</i>	
Design and Optimization of High-Impedance Transmission Line Electrode for High-Power and High-Bandwidth Photodetector.....	1180
<i>Xiaodong Xie, Yongqing Huang, Shaoyu Wang, Xuejie Wang, Xiaofeng Duan, Kai Liu</i>	
End-To-End Geometric Shaping for Long-Haul Coherent Transmission Based on the Artificial Shaping Parameter Setting Approach .....	1185
<i>Jiayu Zheng, Fan Zhang</i>	
The Effect of Coupling Offset to VCSEL-MMF Links for Short-Reach Optical Communications.....	1188
<i>Zijing Huang, Lin Sun, Gordon Ning Liu</i>	
Accurate DGD Estimation in All-Order PMD Model for High Baud Rate System .....	1192
<i>Ting Jiang, Zheng Gao, Ming Tang</i>	
Design of Multi-Functional Reconfigurable Microwave Photonic Chip.....	1195
<i>Xiaohang Zhang, Chaotan Sima, Tailin Lil, Qazi Salman Ahmed, James C. Gates, Peter G. R. Smith</i>	
Adaptive Cross-Layer Bandwidth Defragmentation for Multi-Band Optical Network.....	1198
<i>Jiaxin Liu, Ziyi Xi, Rentao Gu</i>	
Mode Converters Based on the Long-Period Gratings Inscribed in Tapered Few Mode Fiber .....	1203
<i>Peng Wei, Yuehui Ma, Long Chen, Yunqi Liu</i>	
Intelligent Mode-Locking Enabled by Real-Time Reinforcement Learning .....	1206
<i>Jiajin Wang, Guoqing Pu, Zhiwei Fang, Chao Luo, Yong Wu, Lilin Yi</i>	
High-Baudrate Silicon Photonics Ring Resonator Modulators for Short-Reach Applications.....	1210
<i>Oskars Ozolins, Armands Ostrovskis, Aleksandrs Marinins, Toms Salgals, Michael Koenigsmann, Benjamin Krüger, Fabio Pittalà, Ints Murans, Arvids Sedulis, Kristaps Rubuls, Dilan Enrique Ortiz Blanco, Ryan P. Scott, Hansjoerg Haisch, Mahdieh Joharifar, Richard Schatz, Lu Zhang, Jurgis Porins, Sandis Spolitis, Xianbin Yu, Markus Gruen, Hadrien Louchet, Vjaceslavs Bobrovs, Xiaodan Pang</i>	
Entanglement Networks with Fiber-Pigtailed Silicon Nitride Microring .....	1214
<i>Yun-Ru Fan, Jin-Peng Wu, Ri-Yao Song, Hao Yu, Hong Zeng, Guang-Wei Deng, Hai-Zhi Song, You Wang, Li-Xing You, Zhen Wang, Guang-Can Guo, Qiang Zhou</i>	
Neuromorphic Computing with the Plasmonic Microcavity for All Types of Logic Tasks.....	1217
<i>Yihang Lai, Zhiwei Yang, Jian Dai, Tian Zhang, Kun Xu</i>	

Neural Network Equalizer with Gate Control Mechanism in High-Speed PAM4 Short-Reach Optical System .....	1221
<i>Hui Chen, Siyue Jin, Chao Li, Qibing Wang, Zichen Liu, Lei Wang, Zhixue He</i>	
Characterizing Kerr Optical Frequency Combs Using Quantum Interference .....	1225
<i>Jin Guo, Yun-Ru Fan, Yong Geng, Guang-Wei Deng, Hai-Zhi Song, You Wang, Li-Xing You, Zhen Wang, Heng Zhou, Kun Qiu, Guang-Can Guo, Qiang Zhou</i>	
A Field Trial of 400G C+L Transmission System with Fast Automatic Power Management .....	1228
<i>Yu Tang, Yan Shi, Yakun Hu, Shikui Shen, Xiongyan Tang, Zhuangzhi Li, Wenlin Lv, Zhiguo Zhang</i>	
A Two-Step Pilot-Based Phase Noise Suppression Method for Optical Universal Filtered Multi-Carrier Systems .....	1231
<i>Liu Shi, Xi Fang, Miaoxin Zhu, Yilong Wang, Ding Ding</i>	
A Chaotic Encryption Algorithm with Dynamic Key Enabled by Power-Division Multiplexed Transmission.....	1236
<i>Yinchen Ding, Yi Lei, Qi Lu, Zhongyi Guo, Bin Chen</i>	
A DSP-Based Monitor Algorithm for Time-Varying Trajectory and Rotation Speed of Principal States of Polarization .....	1240
<i>Bin Zhang, Chenxi Ji, Jiarun Zhao, Nan Cui, Xianfeng Tang, Xiaoguang Zhang</i>	
Cooperative Scheduling of PON Domain and TSN Domain for Global Optimization of E2E Time-Sensitive Industrial Flows .....	1244
<i>Chen Su, Jiawei Zhang, Yuefeng Ji</i>	
Wavelength and Polarization State Synchronization Measurement Based on MMF Scattering Pattern.....	1249
<i>Yuxuan Xiong, Ting Jiang, Zheng Gao, Hao Wu, Shaojun Zhou, Ming Tang</i>	
Simplified Two-Dimensional Optical Beamforming Network Based on Cascade Microring Resonators in All-Pass Filter Configuration .....	1252
<i>Fei Duan, Fang Zou, Tao Tang, Yinghui Guo, Xiong Li</i>	
Effect of Phase Noise on Electro-Optic Frequency Combs Using Integrated Lithium Niobate Modulators.....	1255
<i>Pengfei Liu, Hao Wen, Zuhang Li, Yu Yu, Lei Shi, Xinliang Zhang</i>	
Experimental Demonstration Advantage of Photonic Finite Automata.....	1258
<i>Yuan-Yuan Zhao, Keren Li, Chao Li, Shenggen Zheng, Zhixue He</i>	
A 100Gbps Monolithic Integrated Analog Coherent QPSK Optical Receiver Based on a COSTAS Optical Phase-Locked Loop .....	1261
<i>Yihao Yang, Yongliang Xiong, Yangming Ren, Qianli Ma, Jintao Xue, Zhiyuan Yu, Nan Qi, Biniao Wang</i>	
Automated Design of FSR-Free Silicon Photonics Microring Filters Based on Sparse Spectral Response.....	1265
<i>Yu Chen, Meilin Zhong, Gangxiang Shen, Gordon Ning Liu, Wei Cao, Shenghao Liu, Xiaogang Chen, Xu Sun</i>	
Multi-Dimensional Data Collection for High-Performance Optical Transport Network Maintenance and Optimization .....	1268
<i>Yu Tang, Xiongyan Tang, Yakun Hu, Shikui Shen, Yan Shi, Chuanbiao Zhang, He Zhang, Zhiguo Zhang</i>	

Design and Simulation of Low-Loss Multimode B-Spline Waveguide Bends Based on Lithium Niobate on Insulator .....	1271
<i>Binhang Xu, Min Liu, Guangshuai Meng, Jing Du, Junqiang Sun, Jian Wang</i>	
Lumped Impairments Compensation Based on a Finite-Impulse-Response Extended Kalman Filter for PDM-QPSK Systems .....	1274
<i>Guanju Peng, Yaping Liu, Zhiqun Yang, Zhanhua Huang, Lin Zhang</i>	
Fast and High-Robustness Adaptive Digital Back-Propagation for Fiber Nonlinearity Compensation .....	1279
<i>Yi Liu, Mingqing Zuo, Dong Wang, Zhengyang Xie, Xin Zhao, Zheng Zheng, Shan Cao, Yunbo Li, Dechao Zhang, Han Li</i>	
Gallium Nitride Microring Based Quantum Light Source .....	1283
<i>Hong Zeng, Zhao-Qin He, Yun-Ru Fan, Jin-Peng Wu, Guang-Wei Deng, You Wang, Hai-Zhi Song, Zhen Wang, Li-Xing You, Chang-Zheng Sun, Yi Luo, Guang-Can Guo, Qiang Zhou</i>	
Integrated Spectrometer by Using Counter-Propagating Arrayed Waveguide Grating and Interleaved Micro-Ring Resonators.....	1286
<i>Zunyue Zhang, Yi Wang, Zhenzhou Cheng, Hon Ki Tsang</i>	
High Sensitivity Nanoparticle Detection Enabled by Microresonators Operating at Exceptional Points.....	1289
<i>Zong Cao, Zijie Wang, Yong Yang, Qi Zhang, Xiaobei Zhang</i>	
High All-Optical Tuning Efficiency in Magnetic Nanoparticles Coated Hollow Microbubble Resonator.....	1292
<i>Junlong Ma, Yiqi Chen, Yang Yu, Yong Yang, Qi Zhang, Xiaobei Zhang</i>	
Subnanometer Resolution Displacement Sensor Based on Vernier Effect .....	1295
<i>Dechun Dan, Yong Yang, Yang Wang, Qi Zhang, Xiaobei Zhang</i>	
Multi-Wavelength Quantum Light Source with Dual Pumps.....	1298
<i>Jin-Peng Wu, Yun-Ru Fan, Hong Zeng, Hao Li, You Wang, Guang-Wei Deng, Li-Xing You, Zhen Wang, Hai-Zhi Song, Guang-Can Guo, Qiang Zhou</i>	
Accelerated FDFD Inverse Design of $1 \times 2$ Beam Splitter Based on Schur Complement Domain Decomposition-Adaptive Mesh Method.....	1301
<i>Jin Li, Houyu Chen, Simei Mao, Zhenmin Chen, Zhengtong Liu, Connie Chang-Hasnain, H. Y. Fu</i>	
High Gain Bi-Doped Fiber Amplifier Operating in the O-Band with a Broad Bandwidth .....	1305
<i>Yuanyuan Yang, Weiqi Wang, Jianxiang Wen, Yanhua Dong, Yana Shang, Yanhua Luo, Xiaobei Zhang, Fufei Pang, Tingyun Wang</i>	
Experimental Study on the Time-Domain Statistical Properties of Er-Doped Random Fiber Laser.....	1308
<i>Xingyu Bao, Jiaojiao Zhang, Yifei Qi, Pan Wang, Longqun Ni, Zinan Wang</i>	
Linear Frequency Swept Laser with High-Repetition-Rate Based on an Iterative Predistortion Method in the Fourier Domain .....	1311
<i>Guomeng Zuo, Quanxin Na, Liyang Shao, Xiaoqi Zhu, Qijie Xie, Huabei Liu, Fang Zhao, Hao Zhang, Dongwei Zhuang, Junfeng Song</i>	
Experimental Characterization of Crosstalk Impact at System Level in Weakly Coupled MCF-Based Subsea Links.....	1314
<i>Ambashri Purkayastha, Alexis Carbo Meseguer, Wesley Tang, Juliana Tiburcio De Araujo, Melanie Jaouen, Jean-Christophe Antona</i>	

Stable Dual-Polarized Mode Oscillation in a Birefringent Buried Heterostructure (BH) Laser.....	1318
<i>Soumi Pal, Arpit Khandelwal, Nitin Bhatia</i>	
10 $\lambda$ $\times$ 3.26Tb/s CPRI-Equivalent Rate 1024-QAM DA-RoF Fronthaul in Single-Mode Fiber Using Coherent-Compliant DSP .....	1323
<i>Xixiao Zhu, Xiansong Fang, Chenbo Zhang, Lingjun Zhou, Jiayu Zheng, Yicheng Xu, Xiaopeng Xie, Fan Zhang, Qunbi Zhuge, Weisheng Hu</i>	
Quantum Teleportation from Photon to Matter at Telecom Band.....	1328
<i>Jinyu Liao, Si Shen, Hao Li, Zhen Wang, You Wang, Guangwei Deng, Haizhi Song, Lixing You, Yunru Fan, Guangcan Guo, Qiang Zhou</i>	
Microwave Pulse Generation Based on Active Mode-Locking Coupled Optoelectronic Oscillator .....	1331
<i>Juncheng Li, Zhengtao Wang, Yali Zhang, Tingchuan Gao, Shouhai Li, Zhiyao Zhang, Shangjian Zhang, Yong Liu</i>	
Autonomous Obstacle Avoidance and Communication Capacity Optimization for UAV-Assisted VLC Systems.....	1335
<i>Liang Li, Jiawei Hu, Xinke Tang, Yuhan Dong</i>	
A Novel MIMO Method for Few-Mode Multi-Core Optical Transmission System Based on Modify Frequency Domain .....	1339
<i>Zhihao Ren, Yongjun Wang, Xingyuan Huang, Lu Han, Chao Li, Qi Zhang</i>	
EDFA Noise Figure Analysis in Non-Ideal Operating Conditions .....	1342
<i>Ambashri Purkayastha, Juliana Tiburcio De Araujo, Alexis Carbo Meseguer, Jean-Christophe Antona</i>	
All-Optical Complex-Valued Convolution Based on Time-Delay Interference Structure.....	1347
<i>Wentao Gu, Xiaoyan Gao, Wenchan Dong, Xinliang Zhang</i>	
High Repetition Rate Harmonic Mode-Locked Erbium-Doped Fiber Laser Based on Graphene Saturable Absorber .....	1350
<i>Jianwei Zhou, Feng Tian, Xiaodong Liu, Yutian Li, Tianze Wu, Qi Zhang, Qinghua Tian, Fu Wang</i>	
Statistics for Intensity of Rayleigh Backscattering Based Coherent Distributed Measurement System .....	1354
<i>Yan Ren, Weilin Xie, Zhongwei Tan, Wei Wei, Yi Dong</i>	
Automatic Optimization of Electro-Optic Frequency Comb Based on Deep Reinforcement Learning .....	1358
<i>Zixuan Li, Shifan Chen, Yunping Bai, Yue Zhou, Xingyuan Xu, Kun Xu</i>	
Survivable Service Planning with Security-Degraded Protection in Physical-Layer Secured Optical Transport Networks .....	1362
<i>Xiaoyu Yu, Wei Wang, Tianhe Liu, Qiaojun Hu, Yajie Li, Yongli Zhao, Yongyuan Liu, Jie Zhang</i>	
Sensing Demodulation from Degraded Spectra of Chiral Fiber Grating Based on Convolutional Neural Network .....	1366
<i>Hongliang Xie, Xiongfeng Rao, Zihan Li, Li Yang</i>	
Wideband-Tunable (2–22 GHz) Low-Phase-Noise (- 120 dBc/Hz) Optoelectronic Oscillator Based on EML with RF-Injection .....	1371
<i>Zhihao Zhang, Dan Lu, Daibing Zhou, Chen Ji, Lingjuan Zhao</i>	

250G Hybrid FiWi Access Based on Coherent PON and MMW Fiber-Wireless Integrated Network .....	1375
<i>Guoqiang Li, Junlian Jia, Boyu Dong, Zhongya Li, Sizhe Xing, Jianyang Shi, Nan Chi, Junwen Zhang</i>	
An Optical Binary Neural Network Processor Enabled by Homodyne Detection Technology.....	1379
<i>Weiwei Pan, Ruoyun Yao, Zhangwan Peng, Jinhua Chen, Wanshu Xiong, Chen Ji</i>	
Comparative Study of Multiplication-Based and Addition-Based Auxiliary Management and Control Channel for FDM PON .....	1382
<i>Wangwei Shen, Jiaye Wang, Guoqiang Li, Sizhe Xing, An Yan, Zhongya Li, Jianyang Shi, Nan Chi, Junwen Zhang</i>	
Mode-Switching Based Reconfigurable Optical Power Splitter for Channel Scalable and MSA- Compatible Optical Interconnects .....	1386
<i>Xinyi Wang, Jiangbing Du, Zuyuan He</i>	
Hybrid Coupler for Examining Indistinguishability Between Surface Plasmon Polariton and Photon.....	1389
<i>Ruo-Yun Luo, Bo-Yu Fan, Yao-Qing Zhang, Yuan-Xia Qi, Yun-Ru Fan, Guang-Wei Deng, You Wang, Hai-Zhi Song, Guang-Can Guo, Qiang Zhou</i>	
Phase Sensitive Amplification Assisted by High-Order Harmonics Based on Six Wave Model.....	1392
<i>Zeyu Wu, Weilin Xie, Wei Wei, Yi Dong, Xuefeng Wang, Mingfei Li, Wenshuai Feng</i>	
A 4-Channel Ultrafast Wavelength-Swept REC-DFB Laser Array for Fiber Bragg Grating Interrogation .....	1396
<i>Lingxin Meng, Pan Dai, Qilu Ban, Kaichuan Xu, Jiacheng Wang, Zhen Li, Feng Wang, Jie Zeng, Shaobo Li, Xiang Ma, Xiangfei Chen</i>	
Microcomb Driven Graphene Oxide Deposited FBG Array for Multispecies Parallel Gas Sensing.....	1401
<i>Zihan Liu, Yiwei Li, Yuchen Wang, Bing Chang, Ning An, Teng Tan, Baicheng Yao</i>	
Numerical Study of 1.6T IM/DD Transmission Based on LWDM Grid Using 200G/Lane Over 2–5 Km of Standard Single Mode Fibers .....	1404
<i>Adrian A. Juarez, Yanjun Zhu, Xin Chen, Ming-Jun Li</i>	
High-Performance Thermo-Optic Switch Based on Graphene Microheater and Fano Slab Photonic Crystal Cavity .....	1409
<i>Xiaoyan Gao, Yilun Wang, Wentao Gu, Wenchan Dong, Xinliang Zhang</i>	
A Stacking Ensemble ML-Based Failure Prediction Model for Optical Networks with Imbalanced Data .....	1413
<i>Zhiming Sun, Chunyu Zhang, Min Zhang, Futao Yang, Danshi Wang</i>	
Impact of FWM on O-Band CW-WDM Links for High-Capacity, Low-Latency Data Center Applications.....	1418
<i>Adrian A. Juarez, Andreas Matiss, Sergey Ten, Pushkar Tandon</i>	
Sensitivity Enhanced Optics Fiber Acoustic Sensor for Gas Leakage Detection in Booster Station.....	1422
<i>Gang Li, Xiaohui Lin, Kehong Zeng, Bin Zhou, Wenming Yang, Fei Wang</i>	
A Time-Domain Carrier Frequency Offset Estimation Algorithm Based on the Power of Zero- Subcarriers for CO-OFDM Systems.....	1425
<i>Jiaxin Yan, Taowei Jin, Xinwei Du, Jing Zhang, Qi Yang, Kun Qiu</i>	
PDM Probabilistically Shaped High-Order QAM Coherent Optical Communication.....	1428
<i>Mingyi Gao, Xin Shi, Xuejing Huang, Xinbang Han, Xiaodi You, Gangxiang Shen</i>	

Differential Doppler Velocity Measurement Using a Distributed Bragg Reflector Mode-Locked Laser .....	1430
<i>Hao Song, Dan Lu, Zhihao Zhang, Fei Guo, Daibing Zhou, Lingjuan Zhao</i>	
Simplified Coherent Reception Enabled by Alamouti Coding and Digital Subcarrier Multiplexing Technology .....	1433
<i>Wei Wang, Dongdong Zou, Zhenpeng Wu, Fan Li, Xingwen Yi, Chao Lu, Zhaohui Li, Qi Sui</i>	
Low-Loss and Broadband Edge Coupler for Cleaved Single Mode Fiber and Lithium Niobate Waveguide .....	1436
<i>Zhenmin Chen, Xin Tu, Chen Zhang, Zhengtong Liu</i>	
Transmitter IQ Mismatch Estimation by Number-Theoretic Net-Based Gaussian Particle Filter for Coherent Optical Communications .....	1439
<i>Shuai Liu, Yangfan Xu, Xinwei Du, Qian Wang, Changyuan Yu</i>	
Low-Loss Fan-In/Fan-Out Devices Based on Multi-Cladding Bridge Fibers .....	1443
<i>Yi Huang, Hai Yang, Chuanlu Deng, Yingying He, Xiaobei Zhang, Tingyun Wang</i>	
Joint Timing and Frequency Synchronization for Coherent Optical SEFDM Systems .....	1447
<i>Jinze Shi, Xinwei Du, Shuai Liu, Qian Wang, Changyuan Yu</i>	
Neuron-Level Transfer Learning for ANN-Based QoT Estimation in Optical Networks .....	1451
<i>Yuhang Zhou, Zhiqun Gu, Jiawei Zhang, Yuefeng Ji</i>	
A Comprehensive Equivalent Circuit Model of Silicon-Based Segmented Microring Modulators for Electronic and Photonic Integrated Circuit Codesign .....	1455
<i>Shenlei Bao, Jintao Xue, Jinyi Wu, Binhao Wang</i>	
Photonic Generation of Triangular-Shaped Waveform with Tunable Symmetry Based on a Single-Drive Mach-Zehnder Modulator and Differentiator .....	1459
<i>Xihaohong Lan, Qiong Zhang, Yunkun Luo, Yang Jiang, Jinjian Feng, Jing Xu, Qianyou Long</i>	
Photonic Multi-Threshold Comparator Based on Mach-Zehnder Modulator .....	1463
<i>Jinjian Feng, Qiong Zhang, Yunkun Luo, Yang Jiang, Xiaohong Lan, Jing Xu, Qianyou Long</i>	
Quantization of Recurrent Neural Network for Low-Complexity High-Speed IM/DD System Equalization Based on Neuron Clustering .....	1466
<i>Zhaopeng Xu, Honglin Ji, Yu Yang, Gang Qiao, Qi Wu, Weiqi Lu, Lulu Liu, Shangcheng Wang, Junpeng Liang, Jiali Li, Jinlong Wei, Zhixue He, Weisheng Hu, William Shieh</i>	
Reservoir Computing System Based on VCSEL with the Self-Polarization-Stabilization Structure .....	1470
<i>Jinze Fan, Taihang Qiu, Yuqing Wu, Lei Deng, Qi Yang, Xiaoxiao Dai, Xiaojing Gao, Deming Liu, Mengfan Cheng</i>	
Experimental Demonstration of SDN-Controlled OFDM VLC System Based on Adaptive Multi-User Bit and Power Loading Algorithm .....	1473
<i>Yongxin Wang, Chengju Hu, Jian Zhao</i>	
Phase Recovery of Probabilistically Shaped 1024-QAM Signals .....	1477
<i>Xinbang Han, Mingyi Gao, Xin Shi, Xuejing Huang, Xiaodi You, Gangxiang Shen</i>	
High Sensitivity Refractive Index Sensor Based on the Cladding Mode of Long-Period Grating Inscribed in Few-Mode Fiber .....	1480
<i>Yuehui Ma, Yunqi Liu, Chengbo Mou</i>	

Availability-Aware Dedicated Path Protection Schemes for Key Service in Quantum-Key-Distribution Optical Networks.....	1483
<i>Bin He, Yuxuan Lu, Hong Chen, Weidong Shao, Min Jiang, Liulei Zhou, Bowen Chen, Weiguo Ju</i>	
A Wearable Strain Sensor Based on Mechanoluminescent Polydimethylsiloxane Fiber.....	1486
<i>Mengjing Tang, Qinchuan Jiang, Ling Luo, Jing Xu, Qingming Chen</i>	
Regulation of Radial Higher-Order Orbital Angular Momentum Mode Based on Helically-Twisted Elliptic Fiber.....	1489
<i>Chuangrong Huang, Jiajing Tu, Shecheng Gao, Weiping Liu, Zhaojun Li</i>	
Ultra-Low-Loss Silicon Waveguides Covering a Very Large Band .....	1493
<i>Gangmin Li, Shihan Hong, Long Zhang, Zixu Xu, Daoxin Dai</i>	
Inter-Core Crosstalk Aware Deep Reinforcement Learning Based Resource Allocation in Multicore Elastic Optical Networks .....	1496
<i>Chenghao Li, Yue-Cai Huang, Liwei Mu</i>	
Deformed Square Microcavity Semiconductor Lasers with Dual Transverse Modes .....	1501
<i>Yang Shi, Hang-Dong Wei, You-Zeng Hao, Yue-De Yang, Jin-Long Xiao, Yong-Zhen Huang</i>	
A Giant Fiber-Optic Gyroscope with Ultra-Low Bias Instability.....	1504
<i>Yanjun Chen, Huimin Huang, Wenbo Wang, Lanxin Zhu, Xinyu Cao, Xiangdong Ma, Zhengbin Li</i>	
Mode Control for Octagonal Microcavity Lasers.....	1507
<i>Zhen-Ning Zhang, Jian-Cheng Li, You-Zeng Hao, Meng-Wei Sheng, Yue-De Yang, Jin-Long Xiao, Yong-Zhen Huang</i>	
Feedback Insensitivity of Self-Chaotic Microcavity Laser .....	1510
<i>Yun-Xiao Dong, Jian-Cheng Li, Ya-Li Li, Yue-De Yang, Jin-Long Xiao, Yong-Zhen Huang</i>	
Narrow Spectral Linewidth O-Band Quantum Dot Distributed Feedback Lasers.....	1513
<i>Shizhe Lin, Zhengqing Ding, Kun Zhan, Minghao Cai, Ying Yu, Siyuan Yu</i>	
On-Chip Four Mode-Division (De)Multiplexer for Conventional Telecom Bands and the TDFA Window .....	1515
<i>Qiyuan Yi, Guanglian Cheng, Zhiwei Yan, Zengfan Shen, Qiyuan Li, Li Shen</i>	
Data-Aware Hierarchical Task Offloading in Collaborative Cloud-Edge Elastic Optical Networks.....	1518
<i>Yuxuan Fan, Jian Dang, Huijie Yang, Liulei Zhou, Hong Chen, Weidong Shao, Bowen Chen, Weiguo Ju</i>	
Photonics-Based Arbitrary Waveform Generator Based on Time Interleaved 1-Bit Delta-Sigma DAC .....	1521
<i>Jinghan Yu, Zhaoyi Wang, Shanyuan Li, Xiaoxiao Xue, Xiaoping Zheng, Bingkun Zhou</i>	
Integrated Scandium-Doped Aluminum Nitride Microring Resonators on 8-Inch Silicon Wafers .....	1525
<i>Kewei Bian, Zhenyu Li, Xingyan Zhao, Yang Qiu, Shaonan Zheng, Yuan Dong, Oize Zhong, Ting Hu</i>	
Fast Characterization System of Multi-Channel Interference Widely Tunable Lasers .....	1530
<i>Ying Li, Jiajun Lou, Kuankuan Wang, Zifeng Chen, Qiaoyin Lu, Weihua Guo</i>	
Cross-Domain Resource Scheduling of Computing Service Based on Particle Swarm Optimization .....	1533
<i>Yang Zhao, Yunyu Zhang, Hui Yang, Tiankuo Yu, Yucong Liu, Yunbo Li</i>	

Distributed Fiber Vibration Event Recognition Using Fractional Fourier Transform and Denoising Diffusion Probabilistic Models.....	1537
<i>Zhao Ge, Can Zhao, Hao Wu, Ming Tang</i>	
Impact of Differential Group Delay on 100 Gb/s/ $\lambda$ IM/DD Passive Optical Networks .....	1540
<i>Haide Wang, Ji Zhou, Jinyang Yang, Weiping Liu, Changyuan Yu, Zhaojun Li</i>	
Timing Recovery for 400G P2MP Optical Networks Using Coherent Digital Subcarrier Multiplexing .....	1543
<i>Haide Wang, Jinyang Yang, Ji Zhou, Zhenping Xing, Keshuang Zheng, Liangchuan Li, Weiping Liu, Changyuan Yu, Zhaojun Li</i>	
Experimental Demonstration of Time-Frequency Transmission in a 22.5 Km 7-Core Fiber Link.....	1548
<i>Jing Zhang, Feng Tian, Xiaodong Liu, Tianze Wu, Qi Zhang, Xuanzhi Gan</i>	
Three Gossiping Protocols in Three-Dimensional Underwater Optical Cellular Network.....	1552
<i>Yuan Wang, Tianyi Zhang, Jiahua Tian, Junwei Zhang, Yitong Xie, Fei Zhang, Guowu Zhang, Gaoxuan Wang, Xiaojian Hong, Chao Fei, Sailing He</i>	
Experimental Demonstration of Traffic-Driven Control Framework and Autonomous Connection Management for Flexible Transport Networks.....	1557
<i>Qiaojun Hu, Wei Wang, Xiangkun Man, Renjie Zhang, Liyazhou Hu, Yongli Zhao, Yajie Li, Guangquan Wang, Yanxia Tan, Jie Zhang</i>	
A Photonic Transceiver for the Aggregation and Disaggregation of Microwave Signals Based on an Optical Frequency Comb Source.....	1560
<i>Haikun Huang, Shengkang Zeng, Lingzhi Li, Jiejun Zhang, Jianping Yao</i>	
All-Polarization-Maintaining L-Band Fiber Ring Laser Mode-Locked by Nonlinear Polarization Rotation .....	1564
<i>Guanyu Ye, Kin Kee Chow, Maolin Dai, Takuma Shirahata, Shinji Yamashita, Sze Yun Set</i>	
Security Provisioning in Quantum Key Distribution-Secured Optical Networks .....	1567
<i>Shifeng Ding, Chun-Kit Chan</i>	
19.02Gbps/25m Underwater Wireless Optical Communication Adopting Probabilistic Constellation Shaping QAM-DMT Transmission .....	1570
<i>Tianyi Zhang, Jiahua Tian, Yuan Wang, Chao Fei, Junwei Zhang, Fei Zhang, Yitong Xie, Guowu Zhang, Gaoxuan Wang, Ji Du, Xiaojian Hong, Sailing He</i>	
High Conversion Efficiency Linearly Polarized Single-Frequency Fiber Laser Based on Yb: YAG Crystal-Derived Silica Fiber.....	1574
<i>Yongtao Chen, Jianxiang Wen</i>	
A Phase Recovery-Aware Algorithm for Kernel Estimation of the Manakov Equation.....	1577
<i>Astrid Barreiro, Gabriele Liga, Alex Alvarado</i>	
A Low-Complexity Demodulation Scheme for Carrier Interleaved Modulation with Differential Coherent Detection of Directly Modulated Lasers .....	1582
<i>Yanting Zhou, Changjian Guo</i>	
Numerical Demonstration of Silicon Micro-Ring Modulator with X-Interleaved PN Junction for High Modulation Efficiency.....	1585
<i>Wenkai Yang, Deji Li, Takaaki Kakitsuka, Kiyoto Takahata</i>	
Error Analysis of Distributed Network Time Synchronization in Time-Varying Topology .....	1589
<i>Kangqi Zhu, Nan Hua, Xiaoping Zheng</i>	

SNR Improvement in Differential Reflection Method for Weak Absorption Measurement.....	1592
<i>Zhen Wang, Shipeng Yao, Jinghao Wang, Chen Hu, Huan Zhang, Hao Sun, Kun Yin, Cun-Zheng Ning</i>	
An Layered Topological Scheduling Method for Cutover in Optical Networks .....	1595
<i>Xin Qin, Tongquan An, Qian Hu, Fan Yang, Xia Gao, Guangnan Su, Yuyang Liu</i>	
Microwave Photonic Channelizer Based on Cascaded Microring Resonators.....	1598
<i>Ziyang Lu, Hongwei Chen, Sigang Yang, Minghua Chen</i>	
Performance of CsPbI <sub>3</sub> Photovoltaics for Indoor Light Harvesting .....	1601
<i>Seon Joong Kim, Jae Won Shim</i>	
Technology and Management Evolution of Optical Networks Oriented at Computing Force Network.....	1604
<i>Liuyan Han, Yang Zhao, Minxue Wang, Dechao Zhang, Han Li</i>	
Cost-Effective Computing Power Provisioning for Video Stream in Computing Power Network with Mixed CPU&GPU.....	1607
<i>Yahui Wang, Yajie Li, Jiaxing Guo, Yingbo Fan, Ling Chen, Boxin Zhang, Wei Wang, Yongli Zhao, Jie Zhang</i>	
Clipping PAM4 for 56G ER Optical Interconnects Using Cost-Effective 10G-Class TOSA and ROSA .....	1611
<i>Qingxin Lu, Ji Zhou, Haide Wang, Weiping Liu, Changyuan Yu, Zhaohui Li</i>	
3.078 Tb/s (162-Gb/s×19) PAM-8 Transmission Based on 1-Km 19-Core Fiber Using Liquid Time-Constant Networks .....	1615
<i>Runzhe Fan, Chao Yang, Ming Luo</i>	
Packaged Ultra-High-Quality Optical Whispering Gallery Mode Microresonators with Air Tightness and 3-Axis Adjustment.....	1618
<i>Haiyun Yuan, You Gao, Jiamin Bai, Siyu Wang, Suwan Sun, Hairun Guo</i>	
Frequency Domain Separation of DAS Multi-Source Aliased Signals .....	1621
<i>Huaxin Gu, Shuaiqi Liu, Feihong Yu, Deyu Xu, Xingwei Chen, Liyang Shao, Yu Wu, Haifeng Zhang</i>	
Monolithic Single Mode QD Discrete Mode Laser Epitaxially Grown on SOI .....	1625
<i>Jing-Zhi Huang, Bo Yang, Ting Wang, Wen-Qi Wei, Zi-Hao Wang, Jian-Jun Zhang</i>	
Central Carrier-Assisted Phase Retrieval Scheme Based on Parallel Alternative Projections GS Algorithm .....	1628
<i>Pengfei Li, Chenglin Bai, Yu Zhang, Wanxiang Bi, Fan Yang, Hengying Xu, Lishan Yang, Xuezhen Wang, Peng Qin</i>	
Experimental Demonstration of Weak Signal Detection Using Photo-Counting Receiver with Inter-Symbol-Interference .....	1632
<i>Chao Li, Zichen Liu, Zhixue He</i>	
Carrier Phase Recovery Combined Optimal Decision Threshold with Principal Component Analysis for Probabilistically Shaped Square-QAM Systems.....	1635
<i>Mingjiao Wang, Xue Tang, Tingting Dong, Zukai Sun, Hengying Xu, Chenglin Bai, Yining Zhang, Lishan Yang, Wanxiang Bi</i>	

Noise Equalization of Nonlinear Frequency Division Multiplexing Wavelength Division Multiplexing System Based on Probabilistic Shaping.....	1640
<i>Yu Zhang, Chenglin Bai, Pengfei Li, Wanxiang Bi, Qi Qi, Hengying Xu, Lishan Yang, Yining Zhang, Fan Yang</i>	
A Sensitive Relative Humidity Sensor Based on a Tapered Fiber Mach-Zehnder Interferometer Coated with Hydrogel.....	1645
<i>Lingchao Bai, Yuanji Fan, Guiyu Wang, Yao Wu, Xuefeng Chen, Xiujuan Yu</i>	
2-D Digital Frequency Offset Loading Technique for Discrete Spectrum Modulated Nonlinear Frequency Division Multiplexing System.....	1651
<i>Donghu Yao, Yanfeng Bi, Mingjiao Wang, Hongbing Gao, Hengying Xu, Yining Zhang, Chenglin Bai, Lishan Yang, Wanxiang Bi</i>	
Gain-Coupled Wide-Ridge-Waveguide High-Power 1.55 $\mu$ m Single-Mode DFB Laser .....	1656
<i>Mukun He, Hongtao Li, Jian Wang, Yanjun Han, Changzheng Sun, Bing Xiong, Zhibiao Hao, Lai Wang, Yi Luo</i>	
Design of UTC- PD with Nanoscale Optical Microstructures.....	1659
<i>Junjie Wang, Kai Liu, Xiaowen Dong, Xiaofeng Duan, Yongqing Huang, Honggang Zhai</i>	
100 GHz High-Repetition-Rate Vortex Fiber Laser .....	1663
<i>Zhi-Yin Feng, Wen-Yao He, Hu Cui, Zhi-Chao Luo, Wen-Cheng Xu, Ai-Ping Luo</i>	
Ultra-Compact Silicon-On-Chip Photonic Devices Based on Inverse Design .....	1666
<i>Maojing Hou, Qiao Wang, Ruiqi Luo, Guandong Liu, Nan Liu, Wei Ma</i>	
Photobiomodulation of Brain Waste Removal System.....	1669
<i>Oxana Semyachkina-Glushkovskaya, Ivan Fedosov, Thomas Penzel, Dongyu Li, Tingting Yu, Valeria Telnova, Elmira Kaybeleva, Elena Saranceva, Andrey Terskov, Alexander Khorovodov, Inna Blokhina, Alexanser Shirokov, Jürgen Kurths, Dan Zhu</i>	
Ultra- Fast Azimuth Rotation Tracking of SOP Evolution Based on Superimposed FrFT Training Sequence.....	1673
<i>Li Wang, Zhi Cheng, Jingchuan Wang, Changyuan Yu, Ming Tang, Jing Zhou</i>	
Photonic Skin Based on Microfiber Bragg Grating for Pulse Wave Detection .....	1678
<i>Hengtian Zhu, Junxian Luo, Shugeng Zhu, Huan Yang, Fei Xu</i>	
Toward Increasing User Capacity Through Application of Loopback-Enabled Architecture and an Adaptive Caching Strategy in Mobile Cellular Networks .....	1682
<i>Cheng Jin, Yongbing Zhang</i>	
Global Power Analyses in Super C Band WDM Transmissions System Based on Parameter Estimation.....	1688
<i>Hongya Wang, Huan Chen, Hong Liu, Hu Shi</i>	
Time-Scheduled End-To-End Entanglement Establishment in Memory-Cells-Limited Quantum Networks .....	1691
<i>Yazi Wang, Xiaosong Yu, Yongli Zhao, Avishek Nag, Jie Zhang</i>	
Taming Brillouin Optomechanics Using Supermode Microresonators .....	1696
<i>Min Wang, Zhi-Gang Hu, Chenghao Lao, Wenjing Liu, Qi-Fan Yang, Bei-Bei Li</i>	
Narrow Bandwidth Hundreds Picosecond Pulse Fiber Laser Based on Carbon Nanotubes Mode-Locker.....	1700
<i>Weixi Li, Lilong Dai, Kaiquan Yan, Yuze Dai, Chengbo Mou, Zhijun Yan</i>	

Fast Wavelength Locking of Thermally Tunable Silicon Vernier Microring Filter Over the O-Band.....	1703
<i>Guangze Wu, Yuanjian Wan, Yu Zhang, Jian Wang</i>	
Load Measurement Based on Forward Stimulated Brillouin Scattering in Photonic Crystal Fiber .....	1706
<i>Xuan Zou, Yunshan Zhou, Zhiyong Zhao, Weilun Wei, Chen Yang, Ming Tang</i>	
Reservoir Computing for Dispersion Compensation in IMDD Transmission .....	1710
<i>Yixian Dong, Yiqian Shi, Liang Liu, Xihua Zou, Wei Pan, Lianshan Yan</i>	
A Novel Fiber Optic Ring Cavity Oscillating DC Magnetic Field Sensing Technology Based on Phase Demodulation.....	1714
<i>Senlin Zhao, Lei Zhao, Jindong Deng, Cheng Zhao, Dongchao Liu, Chenglong Yu, Wenlin Zhang</i>	
Integrated High Accuracy Laser Ranging and Communication Scheme Using Large Dynamic Range and Low-Complexity DSP Algorithm .....	1717
<i>Jianwei Tang, Sheng Cui, Xueyang Li, Yaguang Hao, Yanfu Yang, Weisheng Hu</i>	
End-To-End Design of Diffractive Optical Elements Fabricated by Direct Laser Writing Lithography .....	1721
<i>Yunpeng Xu, Zihan Zang, Haoqiang Wang, Yanjun Han, Hongtao Li, Lai Wang, Changzheng Sun, Zhibiao Hao, Bing Xiong, Jian Wang, Yi Luo</i>	
Ultra-Compact Silicon Waveguide Mode Converting Reflector Based on Inverse Design.....	1725
<i>Shanglin Yang, Yue Yu, Han Zheng, Tong Zhang</i>	
Experimental Demonstration of 520-Mbps LED-Based UWOC Utilizing Nonlinear Weighted DFE .....	1728
<i>King Shing Lo, Junwei Zhang, Chao Lu</i>	
A Deep Learning-Based Model for Human Non-Invasive Vital Sign Signal Monitoring with Optical Fiber Sensor.....	1732
<i>Qichang Zhang, Weimin Lyu, Qing Wang, Changyuan Yu</i>	
PMD Impact on Transport System in Terms of Normalized DGD and ACF.....	1736
<i>Yan Zhang, Nan Cui, Jinyu Sun, Lixia Xi, Xianfeng Tang, Xiaoguang Zhang</i>	
Semantic Optical Fiber Communication System Based on Deep Learning .....	1741
<i>Hongyu Huang, Zhenming Yu, Liming Cheng, Wei Zhang, Yueqiu Mu, Kun Xu</i>	
Privacy-Encrypted Lensless Camera for Face Recognition.....	1744
<i>Zheng Huang, Wanxin Shi, Shukai Wu, Xin Liu, Chen Qian, Wentao Liu, Sigang Yang, Hongwei Chen</i>	
Frequency Response Range Expanded Slope-Assisted BOTDA Sensor Using Randomized Sampling Technique .....	1747
<i>Weilun Wei, Zhonghong Lin, Zhiyong Zhao, Can Zhao, Xuan Zou, Ming Tang</i>	
Performance Analysis of Silicon-Based Optical Coherent Transceiver Chip in S-Band Based on Standard 400 G Modulation Format.....	1751
<i>Qingyu He, Ming Luo, Xu Zhang, Chao Yang, Tao Zeng, Xi Xiao</i>	
Forward Brillouin Scattering Fiber Sensors .....	1754
<i>Avi Zadok</i>	
Optical Fiber Communication System with Intelligent Joint Source-Channel Coded Modulation .....	1758
<i>Liming Cheng, Zhenming Yu, Hongyu Huang, Wei Zhang, Yueqiu Mu, Kun Xu</i>	

Tidal Traffic Prediction for Reliable Optical Network Orchestration in Industry 5.0 .....	1761
<i>Igor Kardush, Sejeong Kim, Elaine Wong</i>	
Triple-Cladding Ytterbium Doped Fiber for 12 kW Single Module.....	1766
<i>Yue Meng, Zuying Xu, Xudong Shi, Yu Li, Tianying Liu, Can Li, Xiao Yan, Wei Zheng, Heng Wang, Jiangang Yu, Zhiyong Zhao, Ming Tang</i>	
Design and Characterization of Line-Defected Silicon Waveguide and High-Q Optical Cavity .....	1771
<i>Sohail Muhammad, Dingwei Chen, Zhe Li, Zihan Huang, Guangjun Wen, Yongjun Huang</i>	
FrFT Based Synchronization Method for Self-Homodyne Coherent FBMC/OQAM Systems.....	1776
<i>Shangxu Yang, Junda Chen, Ming Tang</i>	
Frequency-Tunable Active Mode-Locked Optoelectronic Oscillator Incorporating an Electrically-Switchable Silicon Photonic Micro-Ring Resonator.....	1780
<i>Yaming Liu, Yushu Jiang, Bin Wang, Weifeng Zhang</i>	
SOAPre-Amplified 100Gb/s PON Based on Convolutional Neural Networks Nonlinear Digital Pre-Equalization at O-Band with 33dB Power Budget .....	1784
<i>Yuhan Gong, Runzhe Fan, Chao Yang, Ming Luo</i>	
Optimizing Multi-Source Multi-Sink Maximum Flow with Coverage Constraints in Large-Scale Optical Satellite Networks.....	1788
<i>Yunxiao Ning, Yongli Zhao, Jie Zhang</i>	
A Deep-Reinforcement-Learning-Based Dynamic Scheduling of Delay-Tolerant Requests in Elastic Optical Networks.....	1791
<i>Xiaoying Lin, Yue-Cai Huang, Han Zhang, Jie Zhang</i>	
On-Chip Reconfigurable Silicon Photonic Fabry-Perot Resonator .....	1795
<i>Lang Zhou, Yihao Cheng, Bin Wang, Weifeng Zhang</i>	
An Experimental Validation of Angular Diversity Aperture (ADA) Receiver in MIMO VLC Systems.....	1799
<i>Cuiwei He, Yuto Lim, Chen Chen</i>	
Strategies of Switching Granularity Selection for Lightpath Services in a Multi-Granularity Optical Network.....	1804
<i>Zhilin Yuan, Huitao Zhou, Yongcheng Li, Jiawei Zhang, Gangxiang Shen</i>	
Cavity Stabilization of a Brillouin Fiber Laser Based on Homodyne Phase Locking.....	1807
<i>Rui Wang, Wei Wei, Weilin Xie, Yi Dong</i>	
Single Source Full-Duplex Underwater Wireless Optical Communication System Based on MEMS Grating Modulator.....	1810
<i>Lihang Liu, Xinke Tang, Zhiyan Chen, Yibin Li, H. Y. Fu</i>	
Assessment of Machine-Learning-Based Traffic Prediction Algorithms for Real Access/Metro Network Traffic .....	1814
<i>Zhewei Lei, Fu Wang, Leijing Yang, Qinghua Tian, Li Li, Xiongyan Tang, Qi Zhang, Dandan Sun</i>	
A Lensless Camera Simulator Via Deep Learning .....	1818
<i>Zheng Huang, Xin Liu, Sigang Yang, Wanxin Shi, Chen Qian, Hongwei Chen, Yuyang Han, Wentao Liu</i>	

Coherent Optical Transmitter Impairments Estimation Using Adaptive 2×2 Real-Valued Channel Equalizer.....	1820
<i>Zepeng Gong, Fan Shi, Hanyong Wang, Yafeng Cheng, Desheng Li, Ming Luo, Xu Zhang, Xi Xiao, Xiang Li</i>	
800G Receiver Integrated Chip Based on Tunable Etched Diffraction Grating.....	1825
<i>Nan Liu, Ruiqi Luo, Maojing Hou, Qiao Wang, Guandong Liu, Wei Ma</i>	
Immediate and Advance Reservations with Dynamic Resources Provisioning in Edge-Cloud Elastic Optical Networks.....	1828
<i>Jinrui Wu, Bin He, Hong Chen, Weidong Shao, Min Jiang, Liulei Zhou, Bowen Chen, Weiguo Ju</i>	
Low-Resolution Coherent Optical Fiber Communication System with Digital Backpropagation and Error Feedback Noise Shaping.....	1831
<i>Qiuyang Yin, Zhenming Yu, Xiangyong Dong, Hongyu Huang, Kaixuan Sun, Kun Xu</i>	
Impact of Small-Signal Gain and Saturation Energy on the Mode-Locking States in an YB-Doped Fiber Laser.....	1835
<i>Xinxu Duan, Yuantong Liu, Qigui Huang, Zhengxin Gao, Lei Jin</i>	
Flat-Top, Narrow-Band, Thermally Tunable Optical Filters Based on Multi-Phase-Shifted Bragg Gratings and Suspended Waveguide.....	1840
<i>Lian Zhu, Long Chen, Yonglin Yu, Kaixiang Cao, Yuan Yu</i>	
Mode Dependent Loss Equalized Few-Mode Fiber Photonic Lantern.....	1843
<i>Yingxuan Li, Senyu Zhang, Zhiyong Zhao, Jing Liu, Zhuyixiao Liu, Ming Tang</i>	
Reliability of 100GHz Colliding Pulse Mode-Locked Quantum Dots Laser .....	1847
<i>Jia-Le Qin, Jing-Zhi Huang, Bo Yang, Zi-Hao Wang, Jian-Jun Zhang, Ting Wang</i>	
Clustered Cascaded Optical-Electrical Feedforward Equalization for C-Band Single-Lane 100G ER PAM4 IM/DD Systems.....	1850
<i>Xiaoqian Huang, Fei Xie, Wen Zuo, Yaojun Qiao</i>	
Diagnosis of Dental Caries in OCT Images Based on Deep Learning .....	1855
<i>Shuhao Fan, Huanhuan Yu, Zehua Guan, Fukang Lv, Zhuojun Zhou, Cuixia Dai</i>	
Experimental Investigation on Chirp Characteristics of 3s-DBR Lasers.....	1860
<i>Jiashi Feng, Haixuan Xu, Yonglin Yu</i>	
A Simple and Precise IQ Skew Calibration Method by Spectrum Analysis for Coherent Transmitters.....	1863
<i>Jingchuan Wang, Li Wang, Yaxi Yan, Alan Pak Tao Lau, Chao Lu</i>	
Machine Learning-Based Fiber Optic Salinity Sensor for Temperature Immunity .....	1866
<i>Lirong Ren, Yifan Zhou, Ya-Nan Zhang</i>	
Baud-Rate Clock Recovery and Adaptive Equalization for Intra-Data Center Self-Homodyne Coherent Links .....	1870
<i>Jingpeng Liu, Sheng Cui, Chengbo Li, Tianhang Yao, Jinhao Zhou, Ming Tang</i>	
A Protection Method Based on Shared Slice with Multidimensional Resource in Optical Networks.....	1873
<i>Shuang Ma, Meng Lian, Xin Li, Yongli Zhao</i>	
Tunable Optoelectronic Oscillator Based on Thin Film Lithium Niobate.....	1878
<i>Zijun Huang, Rui Ma, Xinlun Cai</i>	

Performance Improvement by Channel gOSNR Waterfilling .....	1880
<i>Zhiping Jiang, Tianyu Zhao</i>	
Assessment of the Doppler Effect on Transmission Characteristics in LEO Satellite Networks .....	1883
<i>Lipeng Guo, Fu Wang, Weiyi Feng, Haipeng Yao, Dandan Sun, Qi Zhang</i>	
Measurement of 3.331 GHz Pulse Light Signal Using Optical Sampling.....	1888
<i>Jiemin Li, Feng Tian, Xiaodong Liu, Fu Wang, Qi Zhang</i>	
Dynamic Noise Analysis and Linewidth Measurement for Frequency-Swept Laser .....	1891
<i>Qichao Chen, Yubo Zhang, Feifei Yin, Haoyan Xu, Yitang Dai, Kun Xu</i>	
A Stopgap Solution for EON Resource Assignment Postponing the Need for Disruptive Technologies.....	1894
<i>Yuxin Xu, Hang Xing, Bin Chen</i>	
Simultaneous Vibration Sensing and Transmission of a Single-Carrier 5.38 Tb/s Signal Over 41.4 Km Weakly Coupled 7-Core Fiber .....	1897
<i>Xueyang Li, Qian Xiang, Yaguang Hao, Jianwei Tang, Chen Cheng, Qi Wu, Yongchao Jin, Junpeng Liang, Yanfu Yang, Weisheng Hu</i>	
A New High-Precision Micro-Accelerometer Based on Optomechanical System.....	1901
<i>Senyu Zhang, Zhe Li, Xinwei Li, Wenyi Huang, Dingwei Chen, Yongjun Huang</i>	
Effective Impact of Modulation on Interchannel Nonlinear Effects in Realistic Submarine Links with Commercial Transceivers .....	1907
<i>Joana Girard-Jollet, Jean-Christophe Antona, Alexis Carbo Meseguer Alcatel, Sébastien Dupont, Richard Garuz, Andrea Quintana Zambrano, Ghaya Rekaya-Ben Othman</i>	
Unequally-Spaced PAM-4 Enabled Power Budget Enhancement of UDWDM-PON Utilizing Simplified Coherent Receiver .....	1912
<i>Jiajun Zhou, Junda Chen, Hongli Wang, Songnian Fu, Ming Tang</i>	
Learned Volterra Equalization for WDM Systems .....	1916
<i>Nelson Castro, Stylianos Sygletos</i>	
Meta Learning Based QoT Estimation of Lightpaths with Few Samples for Optical Networks .....	1920
<i>Shangbo Lin, Zhiqun Gu, Jiawei Zhang, Yuefeng Ji</i>	
Tunable MEMS-VCSEL with High-Contrast Grating.....	1924
<i>Minglu Wang, Wanhua Zheng, Anjin Liu</i>	
Stable Wideband Signal Dissemination Based on High-Accuracy Optical Transfer Delay Measurement .....	1927
<i>Zelin Lyu, Qianlong Zhang, Bin Wang, Weifeng Zhang</i>	
SDM Solution for Datacenters Based on Weakly-Coupled Multi-Core Fiber .....	1931
<i>Jun Chu, Lei Shen, Xinhua Fu, Shuo Xu, Xianchao Gong, Liubo Yang, Ying Li, Li Zhang, Lei Zhang, Jie Luo</i>	
Electronic CD Compensation Techniques for C Band DWDM IM/DD Systems.....	1936
<i>Kangping Zhong, Abdullah S. Karar, Xiong Wu, Haiqiang Wei, Alan Pak Tao Lau, Chao Lu, Changyuan Yu</i>	
High-Accuracy Solid-State LiDAR Based on Optical Intensity Modulation and Coherent Detection .....	1938
<i>Junze Tian, Jianhao Duan, Bin Wang, Weifeng Zhang</i>	

Temperature-Insensitivity PDMS Coated Silica Microsphere.....	1942
<i>Geng Guo, Xiaoling Jing, Enming Xu, Zuxing Zhang, Bing Sun</i>	
On-Chip Spatial Hilbert Transformer Based on Fourier Optics and Metasurface .....	1946
<i>Yuhan Ma, Shaonan Zheng, Qize Zhong, Yuan Dong, Yang Qiu, Xingyan Zhao, Ting Hu</i>	
Digital-Based Inverse Design for Ultra-Compact Power Splitter on LNOI .....	1950
<i>Lingjun Zhou, Hansi Ma, Xiaomin Nie, Yunchen Li, Zhixue He, Lei Wang, Ke Li, Fan Zhang</i>	
Broadband Arbitrary Coupler Based on Asymmetric Mach-Zehnder Interferometers with Bezier Curves.....	1953
<i>Jiaqi Chen, Yuanbin Liu, Ziheng Ni, Liangjun Lu, Jianping Chen, Linjie Zhou</i>	
Optical Aggregation/De-Aggregation Between QPSK and OOK Channels Enabled by Phase-Sensitive Amplifier-Based Bi-Directional Vector Moving .....	1957
<i>Jiabin Cui, Huashun Wen, Yanxia Tan, Guo-Wei Lu, Zhaoyang Liu</i>	
Low Latency Fiber Communication System Equalizer Based on Photonic Reservoir Computing .....	1960
<i>Xiaoyan Zuo, Li Pei, Bing Bai, Bowen Bai, Jianshuai Wang, Juan Sui</i>	
Multi Hierarchy Mapping Based Computing Power Scheduling for Data Center Optical Network .....	1965
<i>Wenxin Liu, Hui Yang, Tiankuo Yu, Qiuyan Yao, Ao Yu, Jie Zhang</i>	
Photonics-Assisted Complex-Valued Discrete Fourier Transform Processor Based on Temporal Computing.....	1968
<i>Weizhen Yu, Bin Wang, Weifeng Zhang</i>	
On-Chip Fully Reconfigurable Microwave Photonic Flat-Top Filter .....	1972
<i>Zhenjie Yu, Xu Hong, Bin Wang, Weifeng Zhang</i>	
An Optical Arbitrary Spectral Synthesizer .....	1976
<i>Patrick Blown, Ian G. Clarke, Joseph Zagari, Andrei Valdez, Harald Rosenfeldt</i>	
O- Band Optical Burst Mode Amplifier for Optical Switching Data Center Networks .....	1979
<i>Dicky Chung, K. S. Tsang, Ray Man, Dongmei Huang, Alan Pak Tao Lau, C. Lu</i>	
Heterogeneous Integration of GaSb on Ge-SOI Photonic Integrated Circuits for SWIR Applications.....	1981
<i>Xin Guo, Andreas De Groote, Roger Loo, Gunther Roelkens</i>	
Smart Health Monitoring System Based on a Fiber Optic Sensor.....	1984
<i>Yiheng Chen, Weimin Lyu, Weihao Yuan, Changyuan Yu</i>	
Stable Wideband WDM Receiving System Based on Relative Phase-Locking .....	1987
<i>Baixuanyao Ye, Wei Wei, Xi Wang, Weilin Xie, Yi Dong</i>	
A Novel Thermo-Optic Phase Shifter Based on Anti-Symmetric Bragg Grating.....	1990
<i>Shengping Liu, Qiang Li, Yang Zhao, Wei Wang, Guoguang Yao, Shang Gao, Junbo Feng, Qipeng Zhan, Yong Tang</i>	
Surface Plasmon Resonance Refractive Index Sensor Based on Anti-Resonant Fiber.....	1994
<i>Ziqing Zhao, Jinhui Yuan, Jingao Zhang, Kuiru Wang, Binbin Yan, Xinzhu Sang</i>	
Photonic Crystal Fiber Refractive Index Sensor Based on Surface Plasmon Resonance Effect .....	1996
<i>Danlin Feng, Jinhui Yuan, Jingao Zhang, Kuiru Wang, Binbin Yan, Xinzhu Sang</i>	
Paradigm Shift for Optical Access Network: From TDM to FDM.....	1998
<i>Jinlong Wei, Zhixin Liu, Yuan Luo</i>	

A Novel Probabilistic Shaping Based Chaotic Encryption for VLC Systems .....	2001
<i>Jiaqi Chen, Yi Sun, Yize Zhang, Xiao-Ping Zhang, Yuhan Dong</i>	
High Spatial Density Weakly Coupled 7-Core-6mode Fiber and Its (De)Multiplexer.....	2006
<i>Lei Shen, Jun Chu, Shuo Xu, Xianchao Gong, Liubo Yang, Ying Li, Lei Zhang, Jie Luo</i>	
A Study on AM-PM Suppression in an Optical-RF Phase-Locked Loop.....	2010
<i>Kunlin Shao, Penghui Gao, Ping Li, Feng Yang, Yamei Zhang, Shilong Pan</i>	
Real-Time UDWDM-PON Demonstration of Ten Wavelength-Locked 10G Coherent Transponder Using Frequency-Interval Feedback Control.....	2013
<i>Muxin Shi, Tian Qiu, Deming Liu, Xiaoxiao Dai, Qi Yang, Yonghua Feng, Jing Dai, Yudi Fu, Yaqin Wang</i>	
Research on the Splicing Performance of G.654.E Optical Fiber .....	2017
<i>Guangzhe Wu, Xiaomeng Xia, Tong Chen, Hongyan Zhou, Chao Hu, Liyan Zhang, Li Deng, Ying Wang, Can Li, Chao Ma, Yang Li, Yang Liu, Fuwen Bai, Wei Jin, Jun Wu</i>	
Low Power Consumption Supercontinuum Source in the Dispersion Engineered Silicon Nitride Waveguides.....	2020
<i>Ruifeng Chen, Feng Ye, Jiayao Huang, Qian Li</i>	
An Extended L-Band Gain Equalization with a Few Mode Erbium Doped Fiber .....	2023
<i>Jianshuai Wang, Li Pei, Kaihua Hu, Jingjing Zheng, Wenxuan Xu, Jing Li, Tigang Ning, Li Zhong</i>	
Fourier Neural Operator Based Modeling of Long-Haul Optical Fiber Channel in Dual-Polarization Systems.....	2026
<i>Fangfang Huang, Xiatao Huang, Hong Lin, Jing Zhang, Bo Xu, Kun Qiu</i>	
Efficient Redundant Transmission Assurance Mechanisms in the Control Plane for Low-Earth- Orbit Satellite Optical Networks .....	2030
<i>Wenkui Guo, Fu Wang, Weiyi Feng, Qi Zhang, Tao Dong, Jie Yin, Zhewei Lei</i>	
High-Resolution Liquid Level Sensor Based on Microwave Photonics Technique Interrogated Multicore Fiber Interferometer.....	2034
<i>Yucheng Yao, Jianqiang Yuan, Zhiyong Zhao, Lei Shen, Weijun Tong, Ming Tang</i>	
Ultra-Compact Silicon-Based Three Mode Splitter Via Inverse Design Method .....	2039
<i>Jinhua Chen, Weiwei Pan, Yu Cheng, Tao Shi, Xudong Du, Chen Ji</i>	
Non-Line-Of-Sight Underwater Optical Wireless Communications with Wavy Surface.....	2042
<i>Chengwei Fang, Shuo Li, Yimong Wang, Ke Wang</i>	
Non-Hermitian Silicon Nitride Microring Resonators with Large Tunable Bandwidth.....	2047
<i>Yuchen Yin, Xuhan Guo, Yikai Su</i>	
On-Chip Microdisk Resonator Wave-Meter.....	2051
<i>Jianfei Sun, Xuhan Guo, Yikai Su</i>	
Simultaneous Measurement of Magnetic Field and Temperature by Using 3D Printed Multicore Fiber-Tip Probes .....	2055
<i>Cong Xiong, Caoyuan Wang, Wei Ji, Limin Xiao</i>	

Timeslot-Aware Shared Protection Scheme with Dynamic Request Adjustment in QKD Optical Networks .....	2058
<i>Yuxuan Lu, Bin He, Hong Chen, Weidong Shao, Min Jiang, Liulei Zhou, Bowen Chen, Weiguo Ju</i>	
Underwater Wireless Optical Communication Using Diversity Reception and Pruned-Term-Based Nonlinear DFE .....	2061
<i>Chao Fei, Shu Mao, Lusheng Li, Feiping Tang, Zhenxing Ling, Zhaojie Zhang, Tianyi Zhang, Xiaojian Hong, Yuan Wang, Jiahua Tian, Guowu Zhang, Shiyin Li</i>	
Supercontinuum Generation in Silicon-Germanium Core Silica Cladding Fiber Pumped Around the 1550 nm Telecommunication Wavelength.....	2066
<i>Congxiao Xu, Na Chen, Susu Zhang, Zhenyi Chen, Yana Shang, Yong Liu, Shupeng Liu, Fufei Pang, Tingyun Wang</i>	
Real- Time Demonstration of All-Digital Clock Recovery for Satellite Communication .....	2070
<i>Yizhou Wang, Linsheng Zhong, Shenmao Zhang, Yuanxiang Wang, Jinyang Wu, Zhen Luo, Xiaoxiao Dai, Qi Yang, Deming Liu</i>	
Fast Brillouin Optical Time Domain Analysis Utilizing Double-Sideband Digital Optical Frequency Comb .....	2074
<i>Huan He, Yingxuan Li, Xuan Zou, Zhiyong Zhao, Dongmei Huang, Ming Tang</i>	
Turbulent OAM Compensation Using CNN for OAM-Based FSO Communications .....	2078
<i>Wuli Hu, Jiaxiong Yang, Long Zhu, Andong Wang</i>	
Free-Space Multi-Dimentional Mode Coding with Rotating Gear Beams Carrying Orbital Angular Momentum .....	2081
<i>Yangzong Ao, Wuli Hu, Andong Wang, Long Zhu</i>	
A Quantitative Investigation on the Impact of Microring Modulator Coupling States to 112 Gbps PAM4 Signal Transmission .....	2085
<i>Junxiong Tan, Kejia Zhu, Weiyi Meng, Qian Wang, Yu Sun, Junde Lu, Yueqin Li, Jian Sun, Min Miao, Jun Qin</i>	
Free-Space Optical Communication with Bottle Vortex Beam Under Atmospheric Turbulence and Finite Receiving Aperture.....	2090
<i>Jiaxiong Yang, Wuli Hu, Andong Wang, Long Zhu</i>	
FPGA Implementation of 5-Bit Non-Uniform Quantization LDPC Code for High-Speed PON .....	2094
<i>Zipeng Liang, Tian Qiu, Yang Zou, Yizhou Wang, Ningchang Zhangsun, Xiaoxiao Dai, Qi Yang, Deming Liu</i>	
QoS Assured RBMSA Design for Shared Path Protection Based C+L Bands EONs .....	2098
<i>Yunxuan Liu, Nan Feng, Lingfei Shen, Jingjing Lv, Jinhua Hu, Jijun Zhao</i>	
Broadband Helical Long-Period Grating Inscribed in a Double-Cladding Fiber .....	2101
<i>Chen Jiang, Ying Wan, Zuxing Zhang, Yuehui Ma, Chengbo Mou, Yunqi Liu</i>	
Characteristics Optimization of Tuning Fork-Fiber Probes in Shear Force Scanning Near-Field Optical Microscope .....	2104
<i>Hongjie Ma, Na Chen, Zhenmin Liu, Shaoying Li, Yong Liu, Yana Shang, Yangyi Zheng, Shupeng Liu, Tingyun Wang</i>	
Enhanced Velocity Measurement of Lidar by Optical Parametric Assisted Frequency Modulation .....	2109
<i>Hao Zhang, Qijie Xie, Quanxin Na, Nan Zhang, Junfeng Song, Lijun Wang</i>	

Self-Hybridized Exciton-Polaritons in Perovskite Nanostructured Arrays.....	2113
<i>Yuan Zhang, Feng Ye, Jiayao Huang, H. Y. Fu, Qian Li</i>	
Mitigating Fast Thermal Instability by Engineered Laser Sweep in AlN Soliton Microcomb Generation .....	2116
<i>Zihao Wang, Kewei Liu, Shunyu Yao, Yanan Guo, Jianchang Yan, Junxi Wang, Changxi Yang, Chengying Bao</i>	
High Speed Single-Mode Surface-Emitting DFB Laser.....	2119
<i>Nanguo Li, Can Liu, Guojiong Li, Juan Xia, Qiaoyin Lu, Weihua Guo</i>	
Wavelength-Selective $2 \times 2$ Optical Switch Based on a Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> -Assisted Microring for the 2- $\mu$ m Wavelength Band.....	2122
<i>Weixun Zhu, Xing Yang, Huan Li, Liangjun Lu, Linjie Zhou, Daoxin Dai</i>	
All-Fiber Mode-Locked Femtosecond Laser Based on Er: YAG Crystal-Derived Silica Fiber .....	2125
<i>Ying Wan, Chen Jiang, Yuxia Zheng, Yongtao Chen, Taximaiti Yusufu, Jianxiang Wen</i>	
A Terahertz Time-Domain Spectroscopy Based on a High Performance Mode-Locked Fiber Laser .....	2128
<i>Liao Chen, Jingmeng Li, Rongwu Liu, Yufan Du, Chi Zhang, Xiaojun Wu, Xinliang Zhang</i>	
A Hybrid Heuristic Algorithm for Disaster Backup in Data Center Networks.....	2131
<i>Lin He, Jiayuan Hu, Fengchao Fu, Min Gao, Hao Liu, Weihua Cao</i>	
Broadband Signal Synthesis Based on Microwave Photonics Channelization.....	2136
<i>Guchang Chen, Xue Lan, Xiangzhi Xie, Feifei Yin, Kun Xu, Yitang Dai</i>	
Integrated Broadband Lithium Niobate Optical Parametric Amplifier.....	2138
<i>He Gao, Jizhi Zhang, Siyuan Wang, Zejie Yu, Liu Liu, Daoxin Dai</i>	
Study on the Optical Radiation Distribution of Gaussian and Vortex Beams Based on AFM.....	2140
<i>Hengfei Guo, Zhenmin Liu, Shaoying Li, Yong Liu, Na Chen, Shupeng Liu, Heming Wei, Yana Shang, Fufei Pang</i>	
Deterministic Overlay Networking for Edge Computing Distributed Cloud in Optical Networks .....	2144
<i>Mingyang Liu, Guochu Shou, Junli Xue, Mengjie Guo, Hongxing Li, Yaqiong Liu, Yihong Hu</i>	
Fast Configuration Planning Algorithm for Cost Optimization in Undersea Fiber Cable System .....	2149
<i>Haoyu Wang, Guanjun Gao, Zanshan Zhao</i>	
End-To-End Learning Based Symbol-To-Symbol Autoencoder for G-Band Fiber-Terahertz Integrated Communication System .....	2152
<i>Changle Huang, Zhongya Li, Junlian Jia, Sizhe Xing, Chengxi Wang, Boyu Dong, Jianyang Shi, Nan Chi, Junwen Zhang</i>	
Delay-Beat Differential Phase Demodulation for Laser Phase Noise Immunity in Phase-Sensitive OTDR .....	2156
<i>Heng Qian, Chuan Li, Chengli Li</i>	
Frequency Comb Distillation Enabling Broadband Microwave Photonic Channelized Receiver.....	2159
<i>Xiaoling Zhang, Chen Chen</i>	
Ultra-Compact Fiber Refractive Index Probe Based on 3D Printed Fiber-Tip Dual-Ring Interferometer.....	2163
<i>Jing Liu, Yucheng Yao, Zhiyong Zhao, Jie Yan, Xi Xiao, Ming Tang</i>	

Fast Computational Algorithm for the Weakly Coupled FMF Model .....	2167
<i>Zhengyang Li, Yangan Zhang, Xueguang Yuan, Peiren Wang, Yongqing Huang</i>	
Frequency-Hopping Signal Measurement Based on Real-Time Photonic Fourier Transform .....	2171
<i>Xin Liu, Dan Zhu, Jiewen Ding, Zhouyang Pan, Tao Lu, Shilong Pan</i>	
Feedforward Neural Network Enabled Optical Multi-Path Interference Mitigation for High-Speed IMDD Transmission Systems.....	2174
<i>Yongfeng Qiu, Meng Xiang, Hailin Yang, Wenzhuo Cheng, Jianping Li, Songnian Fu, Yuwen Qin</i>	
Application of Full-Nyquist Pulse on Hybrid SSB OFDM-Digital Filter Multiple Access PONs .....	2177
<i>Liang Liu, Yixian Dong, Yiqian Shi, Xihua Zou, Wei Pan, Lianshan Yan</i>	
Photonic Time Compressing Assisted Real-Time Fourier Transform System.....	2181
<i>Tao Lu, Dan Zhu, Jiewen Ding, Boyang Ni, Xin Liu, Shilong Pan</i>	
Synthetic Aperture Based PA-US Dual-Modality All Optical Fiber Imaging .....	2184
<i>Dongchen Xu, Anqi Wang, Geng Chen, Chenhao Dai, Hao Li, Qizhen Sun</i>	
Terahertz Photonics in Radar and ISAC Applications.....	2187
<i>Xianbin Yu, Zhidong Lyu, Zuomin Yang, Hongqi Zhang, Hang Yang, Nan Li, Changming Zhang, Xiaodan Pang, Oskars Ozolins, Lu Zhang, Xianmin Zhang</i>	
Low Power Consumption Digital Signal Processing for Bandwidth Limited Coherent Optical System with Tomlinson-Harashima Pre-Coding .....	2190
<i>Guoxiu Huang, Hisao Nakashima</i>	
Long-Distance SDM Transmission System Based on Parallel Recirculating MCF Loop.....	2193
<i>Xuesong Zhao, Tianwei Bo, Zhongwei Tan, Yi Dong</i>	
High-Capacity Digital-Analog Fronthaul Via Self-Homo Dyne Detection .....	2196
<i>Yixiao Zhu, Chenbo Zhang, Yicheng Xu, Qunbi Zhuge, Xiaopeng Xie, Wei Sheng Hu</i>	
Cluster-Based Method for Eavesdropping Identification and Localization in Optical Links .....	2200
<i>Haokun Song, Rui Lin, Andrea Sgambelluri, Filippo Cugini, Yajie Li, Jie Zhang, Paolo Monti</i>	
Towards Ultra-Wideband Optical Communications Using Novel Optical Amplifiers .....	2204
<i>Yang Hong, Natsupa Taengnoi, Kyle R. H. Bottrill, Yu Wang, Jayanta K. Sahu, Periklis Petropoulos, David J. Richardson, Cosimo Calo, Fabrice Blache, Amirhossein Ghazisaeidi, Jérémie Renaudier</i>	
Optical Camera Communication: Principles and Applications .....	2208
<i>Yitong Wang, Mohamed Shehata, Kandeepan Sithamparanathan, Yiwei Xie, Ke Wang</i>	
Progress on Integrating Quantum Communications in Optical Systems Testbeds .....	2211
<i>Jerry Horgan, Dmitrii Briantcev, Aleksandra Kaszubowska-Anandarajah, Marco Ruffini, Dan Kilper</i>	
High Coupling Efficiency Grating Couplers for Silicon Photonics.....	2216
<i>P. Petropoulos, V. Vitali, R. Marchetti, T. Domínguez Bucio, F. Y. Gardes, C. Lacava</i>	
Fully-Loaded 80X400Gb/s DP-QPSK Transmission with Commercial 12-THz C6T+L6T EDFA Over Record Distance of 7000km .....	2217
<i>Dawei Ge, Mingqing Zuo, Haibin Liu, Lin Gan, Dong Wang, Yongchao Chen, Dechao Zhang, Qiang Guo, Han Li</i>	

First Baud-Rate Sampled DSP-Free Self-Homodyne Coherent Receiver .....	2221
<i>Mingming Zhang, Xuefeng Wang, Can Zhao, Chengbo Li, Zihe Hu, Weihao Li, Haoze Du, Junda Chen, Jiajun Zhou, Shuai Zhang, Siyang Liu, Sheng Cui, Ming Tang</i>	
Cost-Effective and High Capacity-Distance Product (~800Pbit/s×km) Single Mode Transoceanic Transmission Assisted by Silicon-Based Integrated Transponder and Long Span Length .....	2225
<i>Lin Jiang, Xi Xiao, Xingchen He, Youren Yu, Anlin Yi, Hong Li, Ming Luo, Jie Luo, Liangming Xiong, Chengpeng Fu, Qianggao Hu, Wei Pan, Lianshan Yan</i>	
Record Experimental Demonstration of 800G/Lane Based 36-Tb/s 3150-Km Transmission Enabled by Silicon-Based IC-TROSA .....	2230
<i>Xiaoshuo Jia, Yan Li, Jingwei Song, Ming Luo, Chao Yang, Xu Zhang, Qingyu He, Xi Xiao, Daigao Chen, Hongguang Zhang, Jifang Qiu, Xiaobin Hong, Hongxiang Guo, Zhisheng Yang, Jian Wu</i>	
Wideband Tuning Range Microwave Photonic Filter on Thin-Film Lithium-Niobate-On-Insulator for Next-Generation Wireless Communication .....	2234
<i>Hao Yan, YWei Xie, Shihan Hong, Lu Zhang, Hongqi Zhang, Hang Yang, Zhidong Lv, Qianyu He, Ke Wang, Mingming Tan, Andrew Ellis, Daoxin Dai</i>	
High-Precision Static Strain Field Measurement Based on Dense Fiber Bragg Grating Array.....	2238
<i>Weiliang Zhao, Xiangpeng Xiao, Yibo Liu, Peng Wang, Qizhen Sun, Zhijun Yan</i>	
405-GBd OOK and 201-GBd PAM-4 IM/DD Optics at Record Faster-Than-Nyquist Ratios of 226.6% and 62.1% Enabled by Advanced Noise Whitening .....	2242
<i>Qi Wu, Zhaopeng Xu, Yixiao Zhu, Honglin Ji, Yu Yang, Junpeng Liang, Gang Qiao, Shangcheng Wang, Lulu Liu, Jinlong Wei, Qunbi Zhuge, Weisheng Hu</i>	
Field Trial of $7 \times 89\lambda \times 256$ Gb/s C-Band Classical / CVQKD Co-Existence Transmission Over 7-Core Fiber.....	2248
<i>Xin Wang, Jintao Wang, Yingyu Chen, Yongguang Xiao, Zongkai Li, Zhirong Chen, Zhaohui Li, Dawei Wang</i>	
Real-Time 1.6T (2x800G) Optical Interconnection with Coherent BiDi and SiP-Based Polarization Tracker for Dual LOs with 1THz Spacing.....	2252
<i>Juntao Cao, Tao Gui, Keshuang Zheng, Shuai Yuan, Chen Liu, Xuefeng Wang, Liangchuan Li</i>	
Record Long-Haul Transmission with FIFO-Less Multicore EDFA Over 125- $\mu\text{m}$ Cladding MCF .....	2256
<i>Hui Yan, Hao Liu, Wenxiong Du, Yizhou Wang, Shuai Yuan, Yongfu Wang, Ming Chen, Wei Sun, Xuegang Lao, Gonghui Zhang, Lin Wang, Wendou Zhang, Wenwei Xu</i>	
0.9-DB/m Single-Mode Silicon Nitride Nonlinear Integrated Waveguides for Continuous-Wave Wavelength Conversion.....	2260
<i>Ping Zhao, Marcello Girardi, Vijay Shekhawat, Zonglong He, Magnus Karlsson, Victor Torres-Company, Peter Andrekson</i>	
First Demonstration of Quasi-Continuous S+C+L 154.5 Tbit/s Coherent Transmission in Hollow-Core Anti-Resonant Fiber.....	2265
<i>Hui Chen, Xu Zhang, Zichen Liu, Chao Li, Honglin Ji, Siyue Jin, Qibing Wang, Shoufei Gao, Yingying Wang, Wei Ding, Lei Wang, Ming Luo, Xi Xiao, Zhixue He, Shaohua Yu</i>	
100 Gb/s All-Optical Programmable Logic Array Chip Based on Full Set of Canonical Logic Units .....	2269
<i>Xiaoyan Gao, Wentao Gu, Wenchan Dong, Jing Xu, Jianji Dong, Xinliang Zhang</i>	

1-Pb/s CPRI-Equivalent Rate Coherent DA-RoF Fronthaul with 1024-QAM Scalable in Capacity, Reach, and Linewidth Using Residual Carrier-Based Phase Tracking .....	2272
<i>Yixiao Zhu, Xiansong Fang, Chenbo Zhang, Jingjing Lin, Yicheng Xu, Weiwei Hu, Zhangyuan Chen, Qunbi Zhuge, Fan Zhang, Xiaopeng Xie, Weisheng Hu</i>	
1 Milliwatt Pumped Error-Free 38 GBaud Wavelength Conversion with AlGaAs Microresonators of 1 GHz Intrinsic Linewidth.....	2277
<i>Xinda Lu, Chanju Kim, Deming Kong, Nuo Chen, Yuntian Chen, Leif Katsuo Oxenløwe, Kresten Yvind, Xinliang Zhang, Lan Yang, Minhao Pu, Jing Xu</i>	

#### **Author Index**