

2018 Asia Communications and Photonics Conference (ACP 2018)

**Hangzhou, China
26 – 29 October 2018**

Pages 1-592



**IEEE Catalog Number: CFP1839B-POD
ISBN: 978-1-5386-5519-1**

**Copyright © 2018 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:	CFP1839B-POD
ISBN (Print-On-Demand):	978-1-5386-5519-1
ISBN (Online):	978-1-5386-6158-1

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
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

TABLE OF CONTENTS

ON-LINE MONITORING STUDY FOR HIGH VOLTAGE GIS HF GAS BY FLANGE-TYPE OPTICAL FIBER SENSING	1
<i>Zhang Shiling</i>	
FIBER TEMPERATURE-DEPTH PROFILE MEASUREMENT SYSTEM APPLICATION IN THE NORTH YELLOW SEA	4
<i>Li Wang ; Yong-Jie Wang ; Fang Li</i>	
OFDM/QAM FOR MIMO VISIBLE LIGHT COMMUNICATIONS	7
<i>Bangjiang Lin ; Xuan Tang ; Zabih Ghassemlooy ; Chun Lin ; Zhenlei Zhou ; Haiguang Zhang</i>	
AN INTERLEAVE DIVISION MULTIPLE ACCESS BASED SCHEME FOR PASSIVE OPTICAL NETWORK	10
<i>Bangjiang Lin ; Xuan Tang ; Zabih Ghassemlooy ; Chun Lin ; Zhenlei Zhou ; Haiguang Zhang</i>	
HIGHLY SENSITIVE BEND MEASUREMENTS USING A MINIATURE FIBER COLLIMATOR-BASED FABRY-PEROT INTERFEROMETER	13
<i>Xizhen Xu ; Jun He ; Changrui Liao ; Ying Wang ; Yiping Wang</i>	
EXPERIMENTAL INVESTIGATION OF UNDERWATER WEAK OPTICAL COMMUNICATION USING A PHOTOMULTIPLIER TUBE RECEIVER	16
<i>Chunhui Lu ; Chao Li ; Zhengyuan Xu</i>	
TRANSMISSION MODES OF METAL-CLAD POLARIZATION MAINTAINING FIBER POLARIZERS	19
<i>Xinyue Wang ; Wen Sun ; Zhongwei Tan ; Zhu Zhou ; Ziyu Wang</i>	
TE0-TO-TE2 SILICON-ON-INSULATOR INTERNALLY DIELECTRIC WAVEGUIDE MODE CONVERTER	22
<i>Basma E. Abu-Elmaaty ; Mohammed S. Sayed ; Hossam M. H. Shalaby ; Ramesh K. Pokharel</i>	
RESEARCH ON LONG DISTANCE TRANSMISSION AND HIGH TEMPERATURE PERFORMANCE OF DISTRIBUTED FEEDBACK FIBER LASER GEOPHONE ARRAY	25
<i>Yuanyuan Yang ; Zhihui Sun ; Zhiqiang Song ; Xiaohui Liu ; Ming Li ; Jian Guo</i>	
ALL-OPTICAL TEMPORAL DIFFERENTIATOR BASED ON A GAIN-SATURATED DFB-SOA	28
<i>Ye Deng ; Hui Gao ; Bin Li ; Jinping Zhang ; Zhipeng Zhou</i>	
NONUNIFORM QAM GFDM ROF SYSTEM BASED ON PROBABILISTIC SHAPING WITH HUFFMAN CODE	31
<i>Jianxin Ren ; Bo Liu ; Lijia Zhang ; Qi Zhang ; Qinghua Tian ; Feng Tian ; Xiangjun Xin ; Lilong Zhao ; Tingting Sun</i>	
BROADBAND FOCUSING REFLECTORS BASED ON SUBWAVELENGTH GRATINGS	34
<i>Shuo Wang ; Xiaofeng Duan ; Kai Liu ; Yongqing Huang ; Xiaomin Ren</i>	
EXPERIMENTAL STUDY OF HIGH-POWER 1-MHZ, 1.2-NS PULSED YB FIBER LASER USING GAIN-SWITCHING	37
<i>Lijuan She ; Yadong Deng ; Yan Zhou ; Daru Chen ; Zhangwei Yu ; Zexuan Qiang</i>	
BANDWIDTH-VARIABLE DWDM TRANSMISSION FOR DATA CENTER INTERCONNECTS USING MULTIDIMENSIONAL PAM	39
<i>Simon Ohlendorf ; Stephan Pachnicke ; Werner Rosenkranz</i>	
SPEED CHARACTERIZATION OF INGAAS/GAASSB TYPE-II QUANTUM WELLS PIN PHOTODIODES	42
<i>Yaojiang Chen ; Qian Gong ; Baile Chen</i>	
OPTICAL FIBER PRESSURE SENSOR BASED ON SMF-CAPILLARY STRUCTURE	44
<i>Y. B. Yang ; D. N. Wang ; Ben Xu</i>	
OPTICALLY PUMPED LOW THRESHOLD INAS/GAAS QUANTUM-DOT MICROPILLAR LASER ON SI (001) HOLLOW SUBSTRATE	47
<i>Bin Zhang ; Wei-Qi Wei ; Jian-Huan Wang ; Hui Cong ; Ting Wang ; Jian-Jun Zhang</i>	
10 KW-LEVEL PUMP-GAIN INTEGRATED FUNCTIONAL LASER FIBER	49
<i>Aoxiang Lin ; Huan Zhan ; Kun Peng ; Xiaolong Wang ; Li Ni ; Yuying Wang ; Yuwei Li ; Shuang Liu ; Shihao Sun ; Jiangli Jiang ; Jianjun Wang ; Feng Jing</i>	
YB-DOPED TRIPLE-CLADDING LASER FIBER FABRICATED BY CHELATE PRECURSOR DOPING TECHNIQUE	52
<i>Shuang Liu ; Huan Zhan ; Kun Peng ; Shihao Sun ; Yuwei Li ; Jiangli Jiang ; Li Ni ; Xiaolong Wang ; Jianjun Wang ; Feng Jing ; Aoxiang Lin</i>	

AN END-TO-END IP AND OPTICAL COLLABORATIVE SOLUTION FOR 5G TRANSPORT NETWORK.....	55
<i>Ran Pang ; Hui Li ; Guangquan Wang ; Yuefeng Ji ; Xiangkun Man ; Shikui Shen</i>	
PHOTONIC GENERATION OF MICROWAVE FREQUENCY SHIFT KEYING SIGNALS BASED ON DUAL PARALLEL MACH-ZEHNDER MODULATOR STRUCTURE	58
<i>Guodong Wang ; Shanghong Zhao ; Kun Zhang ; Tao Lin</i>	
WIDE RANGE AND HIGH RESOLUTION TRUE TIME DELAY UNIT FOR PHASED ARRAY ANTENNA	61
<i>Mengsha Duan ; Jianxin Ma</i>	
AVALANCHE MULTIPLICATION IN SCHOTTKY-TYPE ALGAN PHOTODIODE WITH HIGH AL-COMPOSITION	64
<i>Huan Yan ; Changshan Liu ; Hailong Wang ; Zhenhua Zhang ; Meng Chen ; Hao Jiang</i>	
FIBER BRAGG GRATING TEMPERATURE SENSORS APPLIED IN HARSH ENVIRONMENT OF AEROSPACE	67
<i>Tao Liao ; Yifei Pei ; Jian Xu ; Heng Lin ; Tigang Ning</i>	
LIGHT COUPLING METHODS BETWEEN SINGLE-MODE FIBER AND EMBEDDED-DUAL-CORE HOLLOW OPTICAL FIBER	70
<i>Peixuan Tian ; Peng Ye ; Zheng Zhu ; Jinhui Shi ; Jun Yang ; Chunying Guan</i>	
POLARIZATION-MAINTAINING FEW-MODE OPTICAL FIBERS WITH AIR-HOLE STRUCTURES	74
<i>Haisu Li ; Han Xiao ; Guobin Ren</i>	
COMPACT 2×2 AND 4×4 GENERAL INTERFERENCE MULTIMODE INTERFEROMETERS BASED ON HYBRID PLASMONIC WAVEGUIDE.....	77
<i>Yunchao Zhang ; Jin Wang ; Zhen Wang ; Yumeng Zhai ; Yunqing Lu</i>	
A NOVEL APPROACH TO PHOTONIC GENERATION OF MICROWAVE HYBRID FSK/PSK SIGNAL.....	80
<i>Kun Zhang ; Shanghong Zhao ; Xuan Li ; Zihang Zhu ; Tao Lin ; Guodong Wang</i>	
HIGH BANDWIDTH SILICON MACH-ZEHNDER MODULATOR BASED ON INTERLEAVED PN JUNCTIONS.....	83
<i>Zhipeng Hu ; Li Jin ; Jin Guo ; Junbo Feng</i>	
SEAMLESS INTEGRATION OF A FIBER-THZ WIRELESS-FIBER 2X2 MIMO BROADBAND NETWORK.....	86
<i>Can Wang ; Xinying Li ; Kaihui Wang ; Wen Zhou ; Jianjun Yu</i>	
TEMPORAL CAVITY SOLITONS IN THE PRESENCE OF AMPLITUDE-MODULATED DRIVING FIELD AND CAVITY DRIFT	89
<i>Wei Chen ; Lina Ma ; Xueliang Zhang ; Xiaoyang Hu ; Chunyan Cao ; Zhou Meng</i>	
POLARIZATION BEAM SPLITTER FOR SILICON-BASED CROSS-SLOT WAVEGUIDES USING AN ASYMMETRICAL EVANESCENT COUPLING SYSTEM.....	92
<i>Shengbao Wu ; Ting Feng ; Xichen Wang ; X. Steve Yao</i>	
DESIGN OF HELICAL TUBE FIBER OPTIC FABRY-PEROT CAVITY PRESSURE SENSOR	95
<i>Qingchao Zhao ; Hui Li ; Long Ma ; Xiaohui Liu ; Faxiang Zhang ; Wenan Zhao</i>	
SPECTRAL TAILORING OF RANDOM FIBER LASER UTILIZING MULTIMODE FIBER	98
<i>Qingyang Meng ; Han Wu ; Bing Han ; Jiaqi Li ; Zinan Wang</i>	
EXPERIMENT AND NUMERICAL SIMULATION OF P-I-N PHOTODETECTORS INTEGRATED WITH DIFFERENT REFLECTORS.....	101
<i>Jing Chen ; Yongqing Huang ; Tao Liu ; Xiaofeng Duan ; Kai Liu ; Xiaomin Ren</i>	
ANALYSIS OF TRANSMISSION CHARACTERISTICS OF MULTI-MODE OPTICAL FIBER ENDCAP	104
<i>Ming-Yang Chen ; Ping He ; Peng Su</i>	
ALL-FIBRE ACOUSTIC SENSOR FOR THE SOUND SOURCE LOCALIZATION.....	107
<i>Ran Gao ; Zhi-Mei Qi</i>	
NUMERICAL INVESTIGATION OF METHOD COMBINED DOPPLER EFFECT WITH MULTI-BEAM LASER HETERODYNE FOR MEASUREMENT OF THE SMALL ANGLE	112
<i>Sheng Qian Wang ; Yong Liu ; Yan Chao Li</i>	
THERMALLY-INDUCED LONG-PERIOD GRATING MODE CONVERTER ON TAPERED POLYMER WAVEGUIDE	116
<i>Bo Wu ; Wei Ke Zhao ; Kai Xin Chen</i>	
PASSIVELY ERBIUM-DOPED MODE-LOCKED FIBER LASER BASED ON SNSE2 NANOSHEETS.....	119
<i>Jinjian Li ; Shuoshuo Zhang ; Zhidong Bai ; Ziwen Jia ; Zhongsheng Man ; Shenggui Fu</i>	

HIGHLY COHERENT AND OCTAVE-SPANNING SUPERCONTINUUM AND FREQUENCY COMB GENERATION IN GERMANIUM WAVEGUIDE WITH ALL-NORMAL DISPERSION	122
<i>Ziwen Huang ; Jinhui Yuan ; Chao Mei ; Zhe Kang ; Xinzhu Sang ; Binbin Yan ; Kuiru Wang ; Chongxiu Yu</i>	
200-GB/S PAM4 TRANSMISSION OVER 80KM SSMF WITH KRAMERS-KRONIG RECEIVER.....	125
<i>Sen Zhang ; Tianjian Zuo ; Lei Liu ; Qiwen Zhong</i>	
COLLOIDAL PLASMONIC METAL OXIDE NANOPARTICLES FOR NONLINEAR OPTICS AND ULTRAFAST PULSE LASERS	128
<i>Xiaofeng Liu ; Qiangbing Guo ; Jianrong Qiu</i>	
SINGLE MODE AND BISTABILITY COUPLED-CAVITY SEMICONDUCTOR LASERS	131
<i>Yong-Zhen Huang ; Fu-Li Wang ; You-Zeng Hao ; Yue-De Yang ; Jin-Long Xiao</i>	
HIGH SENSITIVITY STRAIN SENSOR BASED ON ACOUSTO-OPTIC COUPLING IN CLADDING ETCHED FIBER.....	133
<i>Jianhui Zhao ; Shao-Cheng Yan ; Hai-Kong Lu ; Fei Xu</i>	
SECURE KEY DISTRIBUTION BASED ON CHAOS SYNCHRONIZATION AND ALTERNATING STEP ALGORITHM	136
<i>Xiaoyan Zhao ; Ning Jiang ; Hui Wang ; Anke Zhao ; Kun Qiu</i>	
A COMBINING PAPR REDUCTION METHOD FOR DCO-OFDM UOWC	139
<i>Jurong Bai ; Hang Dai ; Yi Yang</i>	
RESEARCH ON POLARIZATION MODE DISPERSION MEASUREMENT SYSTEM BASED ON SINGULAR VALUE DECOMPOSITION DENOISING	142
<i>Yalei Chu ; Yang'An Zhang ; Xueguang Yuan ; Xiaomin Ren</i>	
TEMPORAL SOLITON COMPRESSION IN SILICA CLAD SILICON PHOTONIC CRYSTAL WAVEGUIDES WITH WIDEBAND LOW DISPERSION	145
<i>Liao Jiali ; Gao Yang ; Sun Yanling ; Ma Lin ; Lu Zhenzhong</i>	
TEMPERATURE-COMPENSATED METHANE SENSOR WITH HIGH SENSITIVITY BASED ON DIRECTIONAL COUPLING IN PHOTONIC CRYSTAL FIBERS	148
<i>Qing Wang ; Haoran Wang ; Hai Liu ; Cancan Chen ; Wen Zhang ; Yi Ding</i>	
SECURITY PERFORMANCE OF POLAR CODES IN UV WIRELESS COMMUNICATIONS	151
<i>Xuetong Liang ; Min Zhang ; Dahai Han</i>	
INCREASING COMMUNICATION PATH DIVERSITY IN MESH-BASED ONOC BY USING MULTI-INTERFACE PROCESSING CORES.....	154
<i>Xinglong Diao ; Hui Li ; Wei Tan ; Huaxi Gu</i>	
WIDE BANDWIDTH RECONFIGURABLE AND FREQUENCY TUNABLE MICROWAVE PHOTONIC FILTER BASED ON TUNABLE ULTRA-SHARP ROLL-OFF OPTICAL FILTER.....	157
<i>Zhidan Ding ; Jiejun Zhao ; Fei Yang ; Zitong Feng ; Bin Lu ; Haiwen Cai</i>	
PHOTONICS-BASED MULTIBAND RADAR APPLYING AN OPTICAL FREQUENCY SWEEPING COMB AND PHOTONIC DECHIRP RECEIVING	160
<i>Bindong Gao ; Fangzheng Zhang ; Yao Yao ; Shilong Pan</i>	
REAL-TIME DECODING FOR FNIRS-BASED BRAIN COMPUTER INTERFACE USING ADAPTIVE GAUSSIAN MIXTURE MODEL CLASSIFIER AND KALMAN ESTIMATOR.....	163
<i>Yao Zhang ; Bingyuan Wang ; Feng Gao</i>	
HIGH POWER NANOSECOND PULSE YTTERBIUM DOPED FIBER LASER BASED ON SEMICONDUCTOR LASER MODULATION TECHNOLOGY	167
<i>Wen Yao ; Zhang Fan ; Zhang Xinhai</i>	
FIVE LOADED PREAMBLES BASED CHANNEL ESTIMATION METHOD FOR CO-OFDM/OQAM SYSTEMS.....	170
<i>Xi Fang ; Zhufeng Suo ; Jianxin Wang ; Lei Zhang ; Xianwei Gao</i>	
ADAPTIVE KALMAN FILTER FOR EXTREME POLARIZATION EFFECTS EQUALIZATION IN COHERENT OPTICAL COMMUNICATION SYSTEM	173
<i>Liyuan Qiu ; Zibo Zheng ; Xiaoguang Zhang ; Nan Cui ; Lixia Xi ; Wenbo Zhang</i>	
ANALYSIS OF THE DESIGNING OF THE PILOT PREAMBLES BASED ON THE USING OF DIFFERENT PROTOTYPE FILTER FOR CO-OFDM/OQAM SYSTEMS.....	176
<i>Xi Fang ; Zhufeng Suo ; Cheng Zhao ; Lei Zhang ; Jianxin Wang ; Xianwei Gao</i>	
A NOVEL PHOTONIC PHASE SHIFTER BASED ON POLARIZATION CONTROLLER AND DUAL-PARALLEL MACH-ZEHENDER MODULATOR	179
<i>Conghui Zhang ; Xinjing Qiu ; Xiaoyu Zhang ; Yongfeng Wei ; Xinlu Gao</i>	
TEST EVALUATION AND STANDARDIZATION PROGRESS OF QKD BASED QUANTUM SECURE COMMUNICATION	182
<i>Jun-Sen Lai ; Wen-Yu Zhao ; Hai-Yi Zhang ; Bing-Bing Wu ; Rui Tang ; Xin Zhao</i>	
HIGH-ORDER TRANSVERSE-MAGNETIC MODE MACH-ZEHENDER MODULATOR FOR OOK MODULATION.....	185
<i>Xinyi Wang ; Linjie Zhou ; Siqi Liu ; Gangqiang Zhou ; Liangjun Lu ; Jianping Chen</i>	

SUPERCONTINUUM GENERATION TRIGGERED BY A WEAK 100-KHZ LINEWIDTH CONTINUOUS-WAVE	188
<i>Renlai Zhou ; Rongle Huang ; Hongpeng Xin ; Qian Li ; H. Y. Fu</i>	
SYMMETRICAL BACK-TO-BACK ZERO-BIAS OPERATIONAL UNI-TRAVELING CARRIER PHOTODIODE	191
<i>Tao Liu ; Yongqing Huang ; Xiaokai Ma ; Kai Liu ; Xiaofeng Duan ; Xiaomin Ren</i>	
FIBER BIOSENSOR EXPLOITING THE MICROFIBER LIGHT POLARIZATION MODULATION	194
<i>Rende Ma ; Luxue Wan ; Yue Pan ; Yunjie Xia</i>	
ULTRACOMPACT POLARIZATION BEAM SPLITTER BASED ON A SILICON-NITRIDE-ASSISTED THREE-WAVEGUIDE COUPLER	197
<i>Zhuo Cheng ; Jun Wang ; Zeyuan Yang ; Haiying Yin ; Wei Wang ; Yongqing Huang ; Xiaomin Ren</i>	
UNIFORM ENTROPY LOADING FOR PRECODED DMT SYSTEMS IN FADING OPTICAL CHANNEL	200
<i>Xi Chen ; Yizhao Chen ; Ming Tang ; Huibin Zhou ; Jingxian Cui ; Tianhao Tong ; Songnian Fu ; Deming Liu</i>	
INDOOR POSITIONING SYSTEM BASED ON SINGLE LED USING SYMMETRICAL OPTICAL RECEIVER	203
<i>Xiaohui Yu ; Jianping Wang ; Huimin Lu</i>	
HYDRAULIC PRESSURE SENSOR BASED ON AN ASYMMETRIC DOUBLE-CORE FIBER	206
<i>Yan Zhou ; Yadong Deng ; Lijuan She ; Daru Chen ; Zhangwei Yu ; Zexuan Qiang</i>	
LOW COST PAM4-TDM-PON UPSTREAM SCHEME BASED ON ELECTRICAL NYQUIST PULSE SHAPING AND HETERODYNE COHERENT DETECTION	209
<i>Bingchang Hua ; Cheng Ju ; Zhiguo Zhang ; Qi Guo ; Xingang Huang</i>	
L-BAND DISSIPATIVE SOLITON GENERATION IN AN ALL-FIBER ER-DOPED LASER WITH A 45 TILTED FIBER GRATING	212
<i>Qianqian Huang ; Chuanhang Zou ; Zhijun Yan ; Chengbo Mou ; Kaiming Zhou ; Lin Zhang</i>	
ALL-FIBER PASSIVELY MODE-LOCKED ERBIUM-DOPED FIBER LASER USING A FEMTOSECOND LASER INSCRIBED 45 -TILTED FIBER GRATING	215
<i>Zinan Huang ; Qianqian Huang ; Chuanhang Zou ; Chengbo Mou ; Kyriacos Kalli ; Antreas Theodosiou</i>	
PESUDO PILOT POWER OPTIMIZATION BASED PILOT DESIGN CRITERION FOR OPTICAL OFDM/OQAM	218
<i>Xi Fang ; Yueyang Yu ; Cheng Zhao ; Lei Zhang ; Jianxin Wang ; Xianwei Gao</i>	
POLY PHASE NETWORK FOR POLARIZATION-DIVISION-MULTIPLEXED OPTICAL OFDM/OQAM	221
<i>Xi Fang ; Yueyang Yu ; Cheng Zhao ; Lei Zhang ; Jianxin Wang ; Xianwei Gao</i>	
COMPACT AND ELECTRO-OPTIC TUNABLE INTERLEAVER IN LITHIUM NIOBATE THIN FILM	224
<i>Xue Peng Li ; Kai Xin Chen ; Ling Fang Wang</i>	
LONG-TERM STABLE MODE-LOCKED FIBER LASER AT 2 μM BASED ON BLACK PHOSPHORUS	227
<i>Xiaoxi Jin ; Tao Wang ; Hanshuo Wu ; Jiaxin Song ; Jian Wu ; Rongtao Su ; Pu Zhou</i>	
DYNAMIC BANDWIDTH SCHEDULING ALGORITHM FOR SPACE APPLICATIONS IN FC-AE-1553 SWITCHING NETWORK	229
<i>Yue He ; Liqian Wang ; Yueying Zhan ; Suzhi Cao ; Xiao Luo</i>	
RADIO-FREQUENCY TRANSFER OVER A 1007-KM FIBER LINK BY PASSIVE PHASE CONJUGATION	232
<i>Fan Hu ; Chenxia Liu ; Dongxing Wang ; Jingxi Liang ; Shujin Zhou ; Yaojun Qiao ; Song Yu</i>	
COMPARISON OF BIT-LOADING AND DFT-SPREAD DMT SIGNAL TRANSMISSION IN O-BAND IM/DD SYSTEM UTILIZING DML	235
<i>Dongdong Zou ; Fan Li ; Zibin Li ; Yidan Sun ; Li Ding ; Xingwen Yi ; Zhaohui Li ; Qi Sui ; Jianping Li</i>	
LOW-COMPLEXITY TIME DOMAIN EQUALIZER FOR MULTICARRIER OFFSET-QAM SYSTEMS	238
<i>Zhennan Zheng ; He Zhu ; Mutong Xie ; Mingzheng Lei ; Xinlu Gao ; Shanguo Huang</i>	
OMNIDIRECTIONAL BENDING SENSOR BASED ON FIBER BRAGG GRATINGS INSCRIBED IN A SEVEN-CORE FIBER	241
<i>Maixiang Hou ; Jun He ; Yiping Wang</i>	
MACRO-BENDING LOSSES OF CIRCULAR PHOTONIC CRYSTAL FIBER SUPPORTING 14 OAM MODES	244
<i>Xiangsen Jiao ; Hu Zhang ; Hui Li ; Xiaoguang Zhang ; Lixia Xi ; Zhuo Zhang</i>	
ALL-OPTICAL TWO-BIT MAGNITUDE COMPARATOR USING QUANTUM-DOT SEMICONDUCTOR OPTICAL AMPLIFIER	247
<i>Kosuke Komatsu ; Gou Hosoya ; Hiroyuki Yashima</i>	

ER-DOPED RANDOM FIBER LASER BASED ON THE INJECTION LOCKING TECHNOLOGY	250
<i>Bo Hu ; Weili Zhang ; Yunjiang Rao</i>	
NON-ORTHOGONAL BASIS EXPANSION BASED PHASE NOISE SUPPRESSION METHOD FOR CO-OFDM SYSTEM	252
<i>Yue Liu ; Chuanchuan Yang ; Cheng Zhang ; Anzhong Liang ; Zheng Gao ; Hongbin Li</i>	
ENHANCED EFFICIENCY OF GRAPHENE/GAAS NANOWIRE SOLAR CELL BY CHEMICAL DOPING	255
<i>Yanbin Luo ; Xin Yan ; Xia Zhang ; Qichao Lu ; Bang Li ; Xiaomin Ren</i>	
STUDY ON POLARIZATION ROTATOR BASED ON PHOTONIC CRYSTAL FIBER WITH DOUBLE HOLE UNIT CELL	258
<i>Chenglong Xie ; Zejun Zhang ; Yasuhide Tsuji ; Eguchi Masashi ; Chun-Ping Chen ; Tesuo Anada</i>	
DEMONSTRATION OF LIQUID PRESSURE FIBER SENSING BASED ON DISTRIBUTED POLARIZATION CROSSTALK ANALYSIS	261
<i>Zeheng Zhang ; Ting Feng ; Xichen Wang ; Yanling Shang ; Mingming Wang ; X. Steve Yao</i>	
INSULATOR STRING LEAKAGE CURRENT SENSOR BASED ON FIBER BRAGG GRATING	264
<i>Zhehao Yan ; Zhiguo Zhang ; Luming Li ; Tong Zhai ; Renzhong Guo ; Chenying Jiang</i>	
HYBRID III-V ON SILICON FAST AND WIDELY TUNABLE LASER BASED ON RINGS RESONATORS WITH PIN JUNCTIONS	267
<i>Théo Verolet ; Antonin Gallet ; Xavier Pommarède ; Jean Decobert ; Dalila Make ; Jean-Guy Provost ; Maryse Fournier ; Christophe Jany ; Ségolène Olivier ; Alexandre Shen ; Guanghua Duan</i>	
PASSIVELY HARMONIC MODE-LOCKED ER-DOPED FIBER LASER AT 1.15 GHZ BY CARBON NANOTUBES FILM SATURABLE ABSORBER	270
<i>Qianqian Huang ; Chuanhang Zou ; Tianxing Wang ; Chengbo Mou ; Mohammed Al Araithi ; Aleksey Rozhin</i>	
NOISE-LIKE PULSES IN AN ERBIUM-DOPED FIBER LASER BASED ON 45 TILTED FIBER GRATING	273
<i>Xi Cheng ; Qianqian Huang ; Chuanhang Zou ; Chengbo Mou ; Zhijun Yan ; Lin Zhang</i>	
AN OPTICAL FIBER BRAGG GRATING TEMPERATURE SENSOR USING MICROWAVE PHOTONIC FILTERING TECHNIQUE	276
<i>Mengmeng Peng ; Fei Wang ; Lun Shi ; Jingxin Huang ; Wen Kang</i>	
DARK CURRENT ANALYSIS OF MID-WAVE QUANTUM DOTS-IN-A-WELL PHOTODETECTORS MONOLITHICALLY GROWN ON SILICON SUBSTRATE	279
<i>Wei Chen ; Zhuo Deng ; Jian Huang ; Baile Chen ; Huiyun Liu ; Jiang Wu</i>	
DESIGN OF AN IMPROVED RADIALLY SINGLE-MODE AND AZIMUTHALLY MULTIMODE RING-CORE FIBER FOR MODE-DIVISION MULTIPLEXING SYSTEMS	281
<i>Jiawei Han ; Yupeng Li ; Jie Zhang</i>	
HIGH PERFORMANCE THERMO-OPTIC TUNABLE NARROW-BAND FILTER USING ASYMMETRIC SIDEWALL GRATINGS ON SUSPENDED SILICON RIDGE WAVEGUIDE	284
<i>Kai Chen ; Fei Duan ; Yonglin Yu</i>	
30-GB/S PAM-8 TRANSMISSION WITH DIRECTLY-MODULATED LASER USING MACHINE LEARNING EQUALIZER	287
<i>Ahmed Galib Reza ; June-Koo Kevin Rhee</i>	
HIGH-DIMENSIONAL LINEAR OPERATION FOR PHASE-COHERENT SPATIAL MODES	290
<i>Peng Zhao ; Xue Feng ; Wei Zhang ; Yidong Huang</i>	
MODE ANALYSIS FOR CIRCULAR-SIDE SQUARE MICROCAVITY LASERS WITH A CENTER HOLE	293
<i>Yue-De Yang ; Hai-Zhong Weng ; You-Zeng Hao ; Jin-Long Xiao ; Yong-Zhen Huang</i>	
GENERATION AND TRANSMISSION OF SSB-PAM4 SIGNAL WITH A DSP-FREE PHASE ALIGNMENT SCHEME	296
<i>Shaohua An ; Qingming Zhu ; Jingchi Li ; Yikai Su</i>	
DEMONSTRATION OF POINT-TO-MULTIPOINT TRANSMISSION FOR FREE-SPACE OPTICAL COMMUNICATION NETWORKS	299
<i>Hexin Jiang ; Zhaoxin Yu ; Xianglian Feng ; Shiming Gao</i>	
ORBITAL ANGULAR MOMENTUM GENERATOR BASED ON ELLIPTICAL-CORE FIBER CHIRAL LONG-PERIOD GRATINGS	302
<i>Yulu Tian ; Minghui Chen ; Li Yang</i>	
OPTICAL AUTO-CORRELATORS USING SINGLE GASE NANORIBBONS FOR FEMTO-JOULE ULTRAFast PULSES CHARACTERIZATION	305
<i>Feng Liao ; Fuxing Gu</i>	
PIPE LINE SAFETY MONITORING USING DISTRIBUTED OPTICAL FIBER VIBRATION SENSOR IN THE CHINA WEST-EAST GAS PIPELINE PROJECT	308
<i>Gang Li ; Jianxin Zhu ; Ruoyu Sun ; Xiaohui Lin ; Wenming Yang ; Kehong Zeng ; Fei Wang ; Chunguang Wang ; Bin Zhou</i>	

OIL CLASSIFICATION RESEARCH BY A HYPERSPECTRAL SCHEIMPFLUG LIDAR SYSTEM.....	311
<i>Kun Chen ; Chunsheng Yan</i>	
ALL-FIBER FOLDED SOLC FILTERS BASED ON 45 -TILTED FIBER GRATINGS.....	314
<i>Xi Guo ; Zhikun Xing ; Huabao Qin ; Yarien Moreno ; Zhijun Yan ; Qizhen Sun ; Deming Liu ; Lin Zhang</i>	
DISPERSION-ENGINEERED OPTICAL PHASED ARRAY FOR ALIASING-FREE BEAM-STEERING WITH A PLATEAU ENVELOPE.....	317
<i>Weihan Xu ; Linjie Zhou ; Liangjun Lu ; Jianping Chen</i>	
DFB LASERS WITH AN ACTIVE DISTRIBUTED REFLECTOR.....	320
<i>Gonghai Liu ; Gongyuan Zhao ; Qiaoyin Lu ; Weihua Guo</i>	
TUNABLE FIBER LASER FOR ON-DEMAND MODE IN C AND L BANDS.....	322
<i>Bingfeng Dang ; Zhipeng Xie ; Junhui Li ; Shanyong Cai ; Mingying Lan ; Song Yu</i>	
STATISTICAL DISTRIBUTION AND CORRELATION PROPERTIES OF INTERCORE CROSSTALK IN WEAKLY-COUPLED MCFS.....	325
<i>Tiago M. F. Alves ; Ricardo O. J. Soeiro ; Adolfo V. T. Cartaxo</i>	
DEPENDENCE OF THE INTERCORE CROSSTALK DECORRELATION BANDWIDTH ON THE SKEW IN WEAKLY-COUPLED MULTICORE FIBERS WITH MULTIPLE INTERFERERS.....	328
<i>Tiago M. F. Alves ; Adolfo V. T. Cartaxo</i>	
DISTRIBUTED SUB-TREE BASED OPTICAL MULTICASTING SCHEME WITH FAILURE PROBABILITY CONSTRAINTS.....	331
<i>Xiaojian Zhang ; Pengfei Yu ; Peng Wu ; Shuyang Li ; Wei Deng</i>	
(8+1) PUMP-GAIN INTEGRATED FUNCTIONAL FIBER OSCILLATOR.....	334
<i>Kun Peng ; Li Ni ; Shihao Sun ; Feng Jing ; Huan Zhan ; Yuwei Li ; Jiangli Jiang ; Aoxiang Lin ; Xiaolong Wang ; Shuang Liu ; Jianjun Wang</i>	
TIME DOMAIN SYNCHRONOUS OFDM SYSTEM FOR OPTICAL FIBER COMMUNICATIONS.....	336
<i>Chenxin Jing ; Xianfeng Tang ; Xiaoguang Zhang ; Lixia Xi ; Wenbo Zhang</i>	
INTEGRATED BROADBAND MID-INFRARED POLARIZATION INSENSITIVE FOURIER-TRANSFORM SPECTROMETER.....	339
<i>Qiankun Liu ; Joan Manel Ramirez ; Vladyslav Vakarin ; Xavier Le Roux ; Carlos Alonso-Ramos ; Jacopo Frigerio ; Andrea Ballabio ; Enrico Talamas Simola ; David Bouville ; Laurent Vivien ; Giovanni Isella ; Delphine Marris-Morini</i>	
FREQUENCY COMPENSATION RANGE AMPLIFICATION FOR THE STABILIZED OPTOELECTRONIC OSCILLATOR.....	342
<i>Jian Dai ; Yao Zeng ; Xiaoyang Wang ; Anni Liu ; Kun Xu</i>	
HYBRID PROBABILISTIC-GEOMETRIC-SHAPED 8-PAM SUITABLE FOR DATA CENTERS' COMMUNICATION.....	346
<i>Xiao Han ; Mingwei Yang ; Ivan B. Djordjevic</i>	
ULTRA BROADBAND, LOW LOSS AND POLARIZATION INDEPENDENT SILICON NITRIDE INTEGRATED OPTICAL POWER SPLITTER.....	349
<i>Zeshi Yuan ; Ke Wang</i>	
FREQUENCY OFFSET ESTIMATION VIA NONLINEAR SPECTRUM SEARCHING FOR NFDN OPTICAL COMMUNICATION SYSTEMS.....	352
<i>Zibo Zheng ; Xulun Zhang ; Lixia Xi ; Ruihua Yu ; Changqing Li ; Xiaoguang Zhang</i>	
MEASUREMENT AND ANALYSIS FOR CAPACITANCE OF PIN PHOTODETECTOR.....	355
<i>Yanwei Yang ; Yongqing Huang ; Tao Liu ; Xiaokai Ma ; Kai Liu ; Xiaomin Ren</i>	
BLIND MODULATION FORMAT RECOGNITION FOR ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING-BASED ELASTIC OPTICAL NETWORKING.....	358
<i>Lei Zhao ; Hengying Xu ; Chenglin Bai ; Weibin Sun ; Lishan Yang</i>	
DEMONSTRATION OF OPTICAL DIRECT-DETECTION OFDM SIGNAL AMPLIFIED BY SINGLE PUMP FIBER OPTICAL PARAMETRIC AMPLIFIER.....	361
<i>Kai Wang</i>	
LOW TIMING-JITTER AND BROADBAND 10 GHZ OPTICAL COMB GENERATION BASED ON A PHASE LOCKED OPTOELECTRONIC OSCILLATOR.....	364
<i>Huanfa Peng ; Yongchi Xu ; Rui Guo ; Huayang Du ; Jingbiao Chen ; Zhangyuan Chen</i>	
THEORETICAL ANALYSIS AND SIMULATION OF A NOVEL OPTICAL MICROCAVITY.....	367
<i>Hongming Gu ; Yongqing Huang ; Huanhuan Wang ; Xiaofeng Duan ; Kai Liu ; Xiaomin Ren</i>	
DIRECT DETECTION OF 1.176-TB/S (168-GB/S × 7) NYQUIST-PAM-8 OVER 7-CORE FIBER USING DIGITAL PRE-DISTORTION.....	370
<i>Chao Yang ; Ming Luo ; Xiang Li</i>	
MULTI-DIMENSIONAL RESOURCES ASSIGNMENT FOR VARIOUS DEMANDS WITH FLEXIBLE WINDOW IN SDM-EONS.....	374
<i>Rong Ma ; Shan Yin ; Shanguo Huang</i>	

MAGNETIC FIELD SENSOR USING CU-COATED DFB FIBER LASER	377
<i>Chaojiang Hao ; Ying Song ; Wentao Zhang ; Yifei Ma ; Fang Li ; Dongmei Li</i>	
OPTICAL FIBER FABRY-PEROT INCLINOMETER BASED ON WHITE LIGHT INTERFEROMETRY	380
<i>Peng Cui ; Wentao Zhang ; Ying Song ; Yifei Ma</i>	
A HIGH SENSITIVITY FIBER LASER MICROPHONE	383
<i>Yingbo Luo ; Wentao Zhang ; Peng Cui ; Yifei Ma</i>	
FIELD TRAIL OF HIGH RESOLUTION FIBER OPTIC STRAINMETER AND TEMPERATURE SENSOR	386
<i>Wentao Zhang ; Wenzhu Huang ; Yingbo Luo ; Dongliang Lu ; Wenyi Liu ; Li Liu ; Li Wang ; Li Li ; Fangyu Tao</i>	
FIBER OPTIC MAGNETIC FIELD SENSOR UTILIZING DFB FIBER LASER AND TERFENOL-D MATERIAL	389
<i>Wentao Zhang ; Rui Ma ; Yifei Ma ; Chaojiang Hao ; Ying Song</i>	
HIGH-EFFICIENCY AND BROADBAND OPTICAL BEAM SPLITTERS BASED ON ALL-DIELECTRIC POLYMER-BASED METASURFACES	392
<i>Jifei Ding ; Yonghong Ling ; Jing Luan ; Wei Wu ; Shuang Li ; Lirong Huang</i>	
FIRST DEMONSTRATION OF C-BAND WAVELENGTH DEMULTIPLEXER BASED ON A BRAGG REFLECTOR WAVEGUIDE AMPLIFIER USING INP MATERIAL	395
<i>Xiaodong Gu ; Ryosuke Togashi ; Takahiro Sakaguchi ; Akihiro Matsutani ; Fumio Koyama</i>	
STUDY ON ANGLE DIVERSITY RECEIVING SYSTEM FOR VISIBLE LIGHT COMMUNICATIONS	397
<i>Junya Kishi ; Shiro Ryu</i>	
UNI-TRAVELING CARRIER PHOTODIODE FOR HIGH SPEED AND HIGH POWER APPLICATION	400
<i>Yaojiang Chen ; Baile Chen</i>	
DEADLINE-AWARE BANDWIDTH CALENDARING WITH OPTICAL RECONFIGURATION FOR INTER-DC WAN	402
<i>Xiaofei Li ; Lei Wang ; Liqian Wang ; Zhiguo Zhang ; Xue Chen</i>	
THE BIDIRECTIONAL RECIRCULATING LOOP SYSTEM FOR 10000 KM FIBER-OPTIC TIME TRANSFER	405
<i>Jingxi Liang ; Chenxia Liu ; Ruihuan Wu ; Fan Hu ; Zhaohui Wang ; Yaojun Qiao ; Song Yu</i>	
MID-WAVE INAS/GASB SUPERLATTICE PIBN INFRARED PHOTODETECTOR GROWN ON GAAS SUBSTRATE	408
<i>Jian Huang ; Daqian Guo ; Zhuo Deng ; Huiyun Liu ; Jiang Wu ; Baile Chen</i>	
LONG-TERM ULTRA-STABLE BRILLOUIN OPTOELECTRONIC OSCILLATOR WITH A FEEDBACK LOOP	411
<i>Mengyue Shi ; Lilin Yi ; Weisheng Hu</i>	
LOW-OVERHEAD EQUALIZATION BY SVM CLASSIFICATION ENABLED 25-GB/S NRZ PER WAVELENGTH TRANSMISSION WITH 10-G CLASS OPTICS	414
<i>Jiasheng Yu ; Xin Miao ; Meihua Bi ; Longsheng Li ; Weisheng Hu</i>	
1.3 μM WHISPERING GALLERY MODES OBSERVED IN A SI-BASED ROLLED-UP INAS/GAAS BILAYER QUANTUM DOT (BQD) MICROTUBE AT ROOM-TEMPERATURE	417
<i>Zhaoer Chai ; Qi Wang ; Haiqiao Ni ; Hao Liu ; Jiawei Cao ; Yunxuan Zhu ; Kai Liu ; Xiaomin Ren</i>	
GAUSSIAN WAVELET BASIS EXPANSION-BASED PHASE NOISE SUPPRESSION METHOD FOR CO-OFDM SYSTEMS	420
<i>Yongtao Huang ; Yuanxiang Chen ; Jianguo Yu</i>	
DEMONSTRATION OF HARDWARE-EFFECTIVE PHASE SHIFT-BASED SYMBOL-MASKING FOR SECURE COHERENT QPSK SYSTEM	423
<i>Takahiro Kodama ; Tatsuya Miyazaki</i>	
A NOVEL OPTICAL THERMOMETRIC BA3LA0.95PR0.05NB3O12 PHOSPHOR WITH HIGH SENSITIVITY AND SIGNAL DISCRIMINABILITY	426
<i>Bowen Chen ; Chenxia Li ; Degang Deng</i>	
PULSATIONS OF SINGLE SOLITON AND DUAL-SOLITON BUNCH IN A FIBER LASER WITH NET-NORMAL DISPERSION	429
<i>Hong-Jie Chen ; Yan-Jie Tan ; Han Wu ; Shu-Hong Huang ; Ai-Ping Luo ; Zhi-Chao Luo ; Wen-Cheng Xu</i>	
ANALYSIS OF RESPONSE TIME CHARACTERISTICS OF POLYMER-BASED MICROLENS	432
<i>Tao Chen ; Feiyan Li ; Zhongcheng Liang ; Rui Zhao ; Meimei Kong</i>	
VOLUMETRIC FLUORESCENCE IMAGING COMBINED WITH MODIFIED OPTICAL CLEARING FOR ALZHEIMER'S DISEASE PATHOLOGY	435
<i>Lina Liu ; Ang Liu ; Wen Xiao ; Renjian Li ; Xuejuan Hu ; Lingling Chen</i>	

CROSSTALK-AWARE ROUTING, SPECTRUM AND MODE ASSIGNMENT IN FEW MODE FIBER WITH MIMO EQUALIZATION	438
<i>Shijia Guo ; Weiguo Ju ; Shan Yin ; Bao Wang ; Yuan Yuan ; Shanguo Huang</i>	
ROBUST 400G DIGITAL MULTIBAND TRANSMISSION USING FREQUENCY/POLARIZATION CONCATENATED CODE AND FREQUENCY-SELF-TUNING ALGORITHM FOR ROADM SYSTEM.....	441
<i>Takahiro Kodama</i>	
MULTI-IMPAIRMENT COMPENSATION BY MACHINE-LEARNING BASED CLUSTERING FOR OPTICAL 16QAM-SCFDE TRANSMISSION	444
<i>Yuanxiang Chen ; Yongtao Huang ; Jianguo Yu</i>	
CONTROLLABLE SYNAPTIC BEHAVIOR IN PHOTONIC NEUROMORPHIC TRANSISTOR.....	447
<i>Bang Li ; Xin Yan ; Yanbin Luo ; Qichao Lu ; Xia Zhang ; Xiaomin Ren</i>	
WAVELENGTH AND SUBCARRIER JOINT ALLOTICATION SCHEME FOR OFDM -PON	450
<i>Xueyuan Sun ; Lei Wang ; Liqian Wang ; Bingchang Hua ; Zhiguo Zhang ; Xue Chen</i>	
VECTOR MAGNETIC FIELD SENSOR BASED ON EXCESSIVELY TILTED FIBER GRATING ASSISTANT WITH MAGNETIC FLUIDS	453
<i>Tean Lu ; Yuezhen Sun ; Yarien Moreno ; Zhijun Yan ; Changle Wang ; Qizhen Sun ; Hushan Wang ; Deming Liu ; Lin Zhang</i>	
MICHELSON LATERAL SHEARING INTERFERENCE MICROSCOPY FOR QUANTITATIVE PHASE MEASUREMENT	456
<i>Tengfei Sun ; Peng Lu ; Zhuang Zhuo ; Wenhao Zhang ; Jingqi Lu</i>	
HIGHER-ORDER MICRO-FIBER MODES FOR ESCHERICHIA COLI MANIPULATION USING TAPERED FOUR-MODE FIBER	460
<i>Yajie Wang ; Qiangzhou Rong</i>	
SILICON MICRORING RESONATORS TUNED WITH GST PHASE CHANGE MATERIAL.....	463
<i>Hanyu Zhang ; Linjie Zhou ; Jian Xu ; Liangjun Lu ; Jianping Chen ; B. M. A. Rahman</i>	
SIMULTANEOUS DUAL DATA STREAM TRANSMISSION USING RGB AND PHOSPHOR-BASED WHITE LEDS.....	466
<i>Hiromasa Ando ; Shiro Ryu</i>	
SPATIAL-MODE SWITCHABLE, MULTI-WAVELENGTH ALL-FIBER EDF LASER BASED ON LOW MODAL CROSSTALK MODE MUX/DEMUX	469
<i>Muqing Zhou ; Fang Ren ; Juhao Li ; Dawei Ge ; Zhangyuan Chen ; Yongqi He</i>	
THREE-LAYER-CORE FIBER BASED ERBIUM-DOPED FIBER LASER WITH AZIMUTHALLY POLARIZED BEAM OUTPUT	472
<i>Min Tang ; Min Cao ; Yuean Mi ; Haisu Li ; Wei Jian ; Guobin Ren</i>	
GENERATION OF SQUARE PULSE IN AN ALL-FIBER YB-DOPED FIGURE-OF-EIGHT FIBER LASER.....	475
<i>Zihao Li ; Dongfang Jia ; Xu Sun ; Yiting Jin</i>	
OPTICAL FORCES OF FORWARD STIMULATED BRILLOUIN SCATTERING IN OPTICAL NANOFIBERS.....	478
<i>Min Cao ; Min Tang ; Yuean Mi ; Haisu Li ; Wei Jian ; Guobin Ren</i>	
NON-INVASIVE SMART MONITORING SYSTEM BASED ON MULTI-CORE FIBER OPTIC INTERFEROMETERS.....	481
<i>Shuyang Chen ; Fengze Tan ; Zhenyu Huang ; Tianyu Yang ; Jiajing Tu ; Changyuan Yu</i>	
ALL-OPTICAL WAVELENGTH CONVERSION OF PAM-4 SIGNAL USING PHOTONIC INTEGRATED TURBO-SWITCH.....	484
<i>Adnan A. A. Hajomer ; Xulein Yang ; Weisheng Hu ; Nicola Andriolli ; Marco Presi ; Claudio Porzi ; Giampiero Contestabile</i>	
DESIGN AND SIMULATION OF AN OPTICAL BEAM DEFLECTOR BASED ON LIQUID CRYSTAL AND BLAZED GRATING	487
<i>Nan Lin ; Ying-Hong Xue ; Yue-Ping Niu ; Xiao-Qian Wang ; Shang-Qing Gong</i>	
AN INDOOR VISIBLE LIGHT POSITIONING SYSTEM USING ARTIFICIAL NEURAL NETWORK.....	490
<i>Chun Lin ; Bangjiang Lin ; Xuan Tang ; Zhenlei Zhou ; Haiguang Zhang ; Sushank Chaudhary ; Zabih Ghassemlooy</i>	
BROADBAND TRANSMISSIVE QUARTER-WAVE PLATE USING DOUBLE-LAYER METALLIC STRUCTURES.....	493
<i>Zhiwei Li ; Chengde Zhu ; Hao Xu ; Lu Wang ; Jin Liu ; Jiaming Hao</i>	
COST COMPARISON OF HIERARCHICAL OPTICAL CROSS-CONNECT ARCHITECTURES FOR SPATIAL CHANNEL NETWORKS (SCNS).....	496
<i>Yu Asano ; Masahiko Jinno</i>	

EXPERIMENTAL DEMONSTRATION OF PAM-DWMT FOR VISIBLE LIGHT COMMUNICATIONS	499
<i>Zhenlei Zhou ; Bangjiang Lin ; Xuan Tang ; Sushank Chaudhary ; Chun Lin ; Haiguang Zhang ; Weiguo Li</i>	
LIGHTWEIGHT EDGE COMPUTING NETWORK ARCHITECTURE AND NETWORK PERFORMANCE EVALUATION	502
<i>Feng Peng ; Guochu Shou ; Yihong Hu ; Yaqiong Liu</i>	
NONDESTRUCTIVE MEASUREMENT OF POLARIZATION CHARACTERISTICS OF FIBER-PIGTAILED WAVEGUIDE-TYPE RING RESONATORS	505
<i>Yi Lin ; Hanzhao Li ; Jianjie Zhang ; Huilian Ma ; Zhonghe Jin</i>	
ULTRALOW LOSS WAVEGUIDE CROSSING WITH LOW IMBALANCE FOR TWO TRANSVERSE ELECTRIC MODES	508
<i>Beibei Wu ; Yu Yu ; Xinliang Zhang</i>	
HIGH POWER BUDGET COHERENT FREE SPACE OPTICAL COMMUNICATION SYSTEM BASED ON FIBER LASER PHASED ARRAY	511
<i>Silin Chen ; Zhiguo Zhang ; Shanyong Cai</i>	
DATA CENTER OPTICAL INTERCONNECTION BASED ON IRZ-DPSK SIGNAL	514
<i>Xijie Wang ; Yang Lu ; Meihua Bi ; Guixing Huang</i>	
SILICA NANOFIBER BANDGAP FILTERS FOR THE MULTIPLEXING OF HIGH SENSITIVITY PHOTONIC CRYSTAL CAVITY SENSORS ARRAY	517
<i>Xin Chen ; Daquan Yang ; Lingyu Liu ; Xuan Zhang ; Yuefeng Ji</i>	
AN INTEGRATED OPTICAL NEURAL NETWORK CHIP BASED ON MACH-ZEHNDER INTERFEROMETERS	520
<i>Xu Zhao ; Zhenming Yu ; Benlin Liu ; Yu Li ; Hongwei Chen ; Minghua Chen</i>	
UPCONVERSION LUMINESCENCE IN THULIUM-DOPED NAYF₄ NANOPARTICLES EXCITED BY A 980 NM LASER	523
<i>Yadong Deng ; Xin Su ; Zexuan Qiang ; Lijuan She ; Yan Zhou ; Renren Deng ; Daru Chen ; Zhangwei Yu</i>	
RECONFIGURABLE 3D MODE (DE)MULTIPLEXER BASED ON TRIPLE-WAVEGUIDE COUPLER WITH EPSILON-NEAR-ZERO INDIUM TIN OXIDE	525
<i>Weifeng Jiang ; Hongmei Dong ; Rizhao Liu</i>	
DESIGN MONOLITHIC HIGH-CONTRAST GRATING RESONANT-CAVITY-ENHANCED PHOTODETECTOR IN 1550NM	528
<i>Kun Zeng ; Xiaofeng Duan ; Yongqing Huang ; Kai Liu ; Xiaomin Ren</i>	
PHOSPHORUS INFLUENCE ON THE PHOTODARKENING EFFECT OF YB-APS FIBER	531
<i>Shihao Sun ; Huan Zhan ; Kun Peng ; Li Ni ; Xiaolong Wang ; Yuwei Li ; Shuang Liu ; Jiali Jiang ; Juan Yu ; Pengfei Lu ; Jianjun Wang ; Feng Jing ; Aoxiang Lin</i>	
SYNCHRONOUS DIGITAL QUADRATURE DEMODULATION TECHNIQUE FOR RESONANT OPTIC GYROSCOPES	534
<i>Chuanbin Wu ; Yi Lin ; Sen Ye ; Guhong Zhang ; Huilian Ma ; Zhonghe Jin</i>	
MODE-LOCKED PULSES IN A MULTIMODE FIBER LASER	537
<i>Han Wu ; Wei Lin ; Shu-Hong Huang ; Yan-Jie Tan ; Ai-Ping Luo ; Zhi-Chao Luo ; Wen-Cheng Xu</i>	
TUNABLE OPTICAL COMB GENERATION UTILIZING AN OPTOELECTRONIC OSCILLATOR BASED ON STIMULATED BRILLOUIN SCATTERING	540
<i>Huayang Du ; Rui Guo ; Huanfa Peng ; Yongchi Xu ; Zhangyuan Chen</i>	
PHASE DELAY BEAM SPLITTER BASED ON SILICON - SUB-WAVELENGTH GRATING IN OPTICAL COMMUNICATION	543
<i>Huijuan Niu ; Yongqing Huang ; Chunyun Yue ; Huanhuan Wang ; Baoying Liu ; Xiaomin Ren ; Xiaofeng Duan ; Kai Liu</i>	
RESEARCH ON THE INFLUENCE OF THE SATURABLE ABSORBER ON THE PERFORMANCE OF MODE-LOCKED SEMICONDUCTOR LASERS	546
<i>Wu Zhao ; Lu Guo ; Huan Wang ; Guangcan Chen ; Dan Lu ; Lingjuan Zhao</i>	
CROSS-LAYER SPECTRUM DEFRAGMENTATION FOR IP OVER ELASTIC OPTICAL NETWORK	549
<i>Yunrong Zhang ; Ya Zhang ; Yongcheng Li ; Gangxiang Shen ; Yonghu Yan ; Wei Chen</i>	
SCHEDULING STRATEGIES FOR NETWORK LINK UPGRADATION WITH ULTRA LOW LOSS FIBERS	553
<i>Yongcheng Li ; Xiaodong Fu ; Sanjay K. Bose ; Gangxiang Shen</i>	
REDUCING THE RF LINEWIDTH AND TIMING JITTER OF A MODE-LOCKED SEMICONDUCTOR LASER USING OPTICAL FEEDBACK SCHEME	556
<i>Huan Wang ; Lu Guo ; Wu Zhao ; Guangcan Chen ; Dan Lu ; Lingjuan Zhao</i>	
FREQUENCY-SHIFTED MODULATION USING A SINGLE DDMZM AND KRAMERS-KRONIG SCHEME BASED DIRECT DETECTION RECEIVER IN LONG-REACH PON	559
<i>Xiang Gao ; Bo Xu ; Yuancheng Cai ; Mingyue Zhu ; Jing Zhang ; Kun Qiu</i>	

FOUR-PORT MODE-SELECTIVE OPTICAL ROUTER FOR OPTICAL INTERCONNECT	562
<i>Hao Jia ; Ting Zhou ; Xin Fu ; Lei Zhang ; Lin Yang</i>	
RANDOM-INTERLEAVE-BASED ANTI-OCCLUSION SCHEME FOR MIMO-VLC SYSTEM	565
<i>Shuang Zhan ; Zhitong Huang ; Yu Xiao ; Yuefeng Ji</i>	
APPLICATION OF CHIRP-MANAGED LASER AND BITS-INTERLEAVING IN DIGITAL MOBILE FRONTHAUL	568
<i>Kaibo Fang ; Wen Zhou ; Jiao Zhang ; Jianjun Yu</i>	
A NOVEL SCHEME FOR FREQUENCY-SPACE SWITCHABLE OPTICAL FREQUENCY COMB GENERATION	571
<i>Lun Shi ; Fei Wang ; Mengmeng Peng ; Wen Kang ; Jingxin Huang</i>	
AUTOMATIC RECOGNIZATION OF LIVE CELLS USED HYPERSPECTRAL IMAGING	574
<i>Lijin Lian ; Han Peng ; Xuejuan Hu</i>	
SMARTPHONE BASED PENTRAXIN 3 ENZYME-LINKED IMMUNOSORBENT ASSAY FOR POINT-OF-CARE CARDIOVASCULAR DISEASE MONITORING	578
<i>Wei Li ; Bo Dai ; Shujing Chen ; Lulu Zheng ; Xuhua Wang ; Dawei Zhang</i>	
DFB FIBER LASER FOR HIGH-RESOLUTION ACOUSTIC EMISSION DETECTION BASED ON BEAT FREQUENCY INTERROGATION	581
<i>Qing Jia ; Wenzhu Huang ; Wentao Zhang ; Huaixiang Ma ; Hongli He</i>	
INVERSE-DESIGNED ALL-OPTICAL NOT GATE WITH A 1.2×1.2 μM² FOOTPRINT ON SOI	584
<i>Qichao Lu ; Xin Yan ; Yanbin Luo ; Bang Li ; Xia Zhang ; Xiaomin Ren</i>	
CROSSTALK-AWARE ROUTING, SPECTRUM, AND CORE ASSIGNMENT IN SPACE DIVISION MULTIPLEXING NETWORKS WITH BI-DIRECTIONAL MULTI-CORE FIBERS	587
<i>Yidong Chen ; Weiguo Ju ; Shan Yin ; Shijia Guo ; Yuan Yuan ; Shanguo Huang</i>	
COMPARISON OF COHERENT AND DIRECT DETECTION SCHEMES FOR 400G DATA CENTER INTERCONNECTION AND METRO NETWORKS	590
<i>Mingxuan Jiang ; Yixiao Zhu ; Fan Zhang</i>	
VNF PLACEMENT FOR SERVICE CHAINING IN IP OVER WDM NETWORKS	593
<i>Zijian Yang ; Bin Chen ; Mingjun Dai ; Gongchao Su ; Rongping Lin</i>	
HIGH UPSTREAM BANDWIDTH UTILIZATION DWBA ALGORITHM FOR NG-EPON WITH HETEROGENEOUS PROPAGATION DELAYS	596
<i>Xujia Wu ; Wei Wang ; Wei Guo</i>	
ADAPTIVE NEURAL NETWORK TUNED PID CONTROLLER FOR LOW-POWER DFB LASER	599
<i>Gendi Zhou ; Minglun Zhang ; Youyuan Sun</i>	
CIPHERTEXT MAPPING METHOD BASED ON BITWISE NOT OPERATION IN QUANTUM NOISE STREAM CIPHER	602
<i>Kai Wang ; Yajie Li ; Xiaokun Yang ; Yongli Zhao ; Jie Zhang</i>	
A ROBUST LOW-COMPLEXITY SYMBOL SYNCHRONIZATION METHOD BASED ON BIPOLAR NRZ SEQUENCE FOR IMDD OFDM-PON	605
<i>Junjie Peng ; Tingting Xu ; Xuejun Xiong ; You Sun ; Sen Tian ; Junjie Zhang</i>	
EXPERIMENTAL DEMONSTRATION OF 3-BIT ALL-OPTICAL QUANTIZATION BASED ON SLICING SUPERCONTINUUM SPECTRUM	608
<i>Rui Ma ; Kuiru Wang ; Shipai Jing ; Chao Mei ; Jinhui Yuan ; Chongxiu Yu ; Binbin Yan ; Xinzhu Sang</i>	
MITIGATION OF SSBI BASED ON KRAMERS–KRONIG RECEIVER IN SSB-OFDM-ROF SYSTEM	611
<i>Yuancheng Cai ; Xiang Gao ; Yun Ling ; Bo Xu ; Kun Qiu</i>	
ERROR ANALYSES FOR SIMULTANEOUS MEASUREMENT OF TEMPERATURE AND STRAIN BASED ON POLARIZATION-MAINTAINING FEW-MODE FIBERS	614
<i>Zhice Han ; Ningbo Zhao ; Zhiqun Yang ; Guifang Li</i>	
HIGHLY SENSITIVE TEMPERATURE SENSOR BASED ON A MACH-ZEHNDER INTERFEROMETER CREATED IN GRADED INDEX FIBER	617
<i>Fengchan Zhang ; Jun He ; Xizhen Xu ; Yiping Wang</i>	
DUAL-FREQUENCY LASER DOPPLER VELOCIMETER BASED ON INTEGRATED DUAL-MODE AMPLIFIED FEEDBACK LASER	620
<i>Guangcan Chen ; Dan Lu ; Lu Guo ; Wu Zhao ; Huan Wang ; Lingjuan Zhao</i>	
COMPACT FOUR-CHANNEL DIRECTLY MODULATED ANALOG OPTICAL TRANSCEIVER MODULE FOR ANALOG APPLICATION	623
<i>Yao Ye ; Yucheng Zhang ; Lei Deng ; Di Li ; Di Zhang ; Deming Liu</i>	
ATMOSPHERIC TURBULENCE AFFECTED POL-MUX QPSK MODULATING RETRO-REFLECTION FSO TRANSMISSION IN AN ATMOSPHERIC CELL	626
<i>Xianglian Feng ; Hexin Jiang ; Zhihang Wu ; Tianshu Wang ; Huilin Jiang ; Shiming Gao</i>	

CONVERGED FRONTHAUL/BACKHAUL BASED ON INTEGRATED HYBRID OPTICAL NETWORKS.....	629
<i>Federico Tonini ; Carla Raffaelli ; Bahare M. Khorsandi ; Steinar Bjornstad ; Raimena Veisllari</i>	
TUNABLE SEMICONDUCTOR METAMATERIALS	632
<i>Li Min ; Chaoming Luo ; Lirong Huang ; Wengjin Wang ; Qingdong Zeng</i>	
DYNAMIC BUFFERING COST-SAVING MULTI-PATH ROUTING UNDER DIFFERENTIAL DELAY CONSTRAINT IN EONS.....	634
<i>Zhan Zhang ; Shan Yin ; Shijia Guo ; Zebin Lin ; Yidong Chen ; Shanguo Huang</i>	
THE RADIAL MODULATION OF UNIFORM CIRCULAR ARRAY TO MITIGATE DIFFUSION OF ORBITAL ANGULAR MOMENTUM.....	637
<i>Xiyao Song ; Mutong Xie ; Xinlu Gao ; Zhenan Zheng ; Shanguo Huang</i>	
UTILIZATION OF 850 NM NEAR-INFRARED VCSEL FOR HIGH-CAPACITY INDOOR FREE SPACE OPTICAL COMMUNICATIONS	640
<i>Zixian Wei ; Mingyue Guan ; Zihan Zang ; H. Y. Fu</i>	
IMPACTS OF ADC PARAMETERS ON THE PERFORMANCE OF MLSE-DECODING IN 10G-OPTICS ENABLED 50-GB/S PAM-4 TRANSMISSION SYSTEM.....	643
<i>Tingting Xu ; Junjie Peng ; Zhengxuan Li ; Yingxiong Song ; Yingchun Li ; Min Wang</i>	
MICROWAVE PHOTONIC SINGLE-PASSBAND FILTER WITH IMPROVED OUT-OF-BAND REJECTION AND EXTENDED FREQUENCY TUNING RANGE	646
<i>Enming Xu ; Fan Li ; Zuxing Zhang ; Peili Li</i>	
THE SUPPRESSION OF FREQUENCY CHIRP IN DIRECTLY MODULATED MONOLITHIC OPTICAL INJECTION LOCKED DFB LASERS.....	649
<i>Linjie Zou ; Zuye Lu ; Yunshan Zhang ; Jilin Zheng ; Yuke Zhou ; Xiangfei Chen</i>	
A COMPACT TE-PASS POLARIZER BASED ON SHALLOWLY ETCHED SOI RIDGE WAVEGUIDES WITH VARYING WIDTHS	652
<i>Xiaofeng Huang ; Zhaowei Ke ; Renyou Ge ; Xinlun Cai</i>	
IONISING RADIATION INDUCED EFFECTS ON BISMUTH/ERBIUM CO-DOPED OPTICAL FIBRES.....	655
<i>Yanhua Luo ; Gui Xiao ; Qiancheng Zhao ; Andrei Stancalie ; Daniel Ighigeanu ; Daniel Negut ; Dan Sporea ; Binbin Yan ; Jun He ; Jianxiang Wen ; Gang-Ding Peng</i>	
CYLINDRICAL VECTOR BEAM YTTERBIUM-DOPED FIBER LASER	658
<i>Zuxing Zhang ; Hongdan Wan ; Jie Wang ; Jiaojiao Zhang ; Yang Xu ; Lin Zhang</i>	
STIMULATED BRILLOUIN SCATTERING FIBER LASER WITH EFFECTIVE SUPPRESSION OF THE NUMBER OF LONGITUDINAL MODES	661
<i>Mingming Wang ; Ting Feng ; Weidong Lai ; X. Steve Yao</i>	
LOW DISPERSION PHOTONIC CRYSTAL FIBER FOR OAM MODE	664
<i>Xin Wan ; Zuxing Zhang ; Yunyun Guo ; Hongdan Wan</i>	
SECURITY-ENHANCED CHAOS COMMUNICATION WITH NON-STANDARD OPTICAL TIME LENS.....	668
<i>Hui Wang ; Ning Jiang ; Xiaoyan Zhao ; Anke Zhao ; Kun Qiu</i>	
A PHOTONIC APPROACH FOR LFM BANDWIDTH BROADENING BASED ON SUB-CHIRP SIGNAL SPLICING.....	671
<i>Yirong Xu ; Shangyuan Li ; Xiaoxiao Xue ; Xiaoping Zheng ; Bingkun Zhou</i>	
ON-CHIP DEVICES FOR OPTICAL AND MICROWAVE SIGNAL PROCESSING	675
<i>Lawrence R. Chen</i>	
4TB/S FASTER-THAN-NYQUIST WDM 16-QAM SIGNAL TRANSMISSION WITH KRAMERS-KRONIG DETECTION.....	678
<i>Yixiao Zhu ; Mingxuan Jiang ; Fan Zhang</i>	
OCTAVE-SPANNING FLATTENED DISPERSIVE SLOT WAVEGUIDE FOR ON-CHIP CHIRPED PULSE AMPLIFICATION.....	681
<i>Yuxi Fang ; Changjing Bao ; Zhi Wang ; Yange Liu ; Lin Zhang ; Si-Ao Li ; Yiwen Zhang ; Hao Huang ; Yongxiong Ren ; Zhongqi Pan ; Yang Yue</i>	
THREE-DIMENSIONAL WAVELENGTH AND POLARIZATION DIRECTIONAL COUPLER BASED ON NANOWIRE WAVEGUIDES.....	684
<i>Zichen Liu ; Xi Xiao ; Lei Wang ; Xiang Li ; Yuguang Zhang ; Daigao Chen</i>	
SINGLE CARRIER TIME DOMAIN FTN SIGNALING ENABLED BY CASCADED BPSK ITERATIVE DETECTION.....	687
<i>Pengfei Wang ; Yixiao Zhu ; Fan Zhang</i>	
A NOVEL MINIATURIZED ALL-OPTICAL SWITCH BASED ON OPTICAL GRADIENT FORCE	690
<i>Xinye Fan ; Shumin Kong ; Wenjing Fang ; Huijuan Niu ; Nanguang Chen ; Chenglin Bai</i>	

TUNABLE OPTICAL TRUE TIME DELAY LINE BASED ON RING ARRAY	693
<i>Zhaowei Ke ; Renyou Ge ; Xinlun Cai</i>	
ALL-FIBER WAVELENGTH TUNABLE ACTIVELY MODE-LOCKED HO-DOPED FIBER LASER	695
<i>Ma Wanzhuo ; Wang Tianshu ; Zhao Desheng ; Liu Runmin ; Wang Furen ; Jiang Huilin</i>	
TERAHERTZ PHOTONIC SIGNAL GENERATION EMPLOYING INAS/INP QUANTUM DASH LASER	698
<i>E. Alkhazraji ; A. Ragheb ; Q. Tareq ; M. Esmail ; H. Fathallah ; S. Alshebeili ; M. Z. M. Khan</i>	
OPTIMIZATION OF THE CHANNEL ESTIMATION TRAINING SEQUENCE FOR PRECODED DDO-OFDM SYSTEM	700
<i>Tianhao Tong ; Xi Chen ; Ming Tang ; Huibin Zhou ; Yizhao Chen ; Songnian Fu ; Deming Liu</i>	
ITERATIVE CHANNEL EQUALIZATION FOR ADO-OFDM IN SHORT-HAUL FIBER-OPTICAL LINKS	703
<i>Zhixue He ; Ming Luo ; Xiang Li</i>	
AN OPTICAL FREQUENCY COMB WITH HIGH CARRIER-TO-NOISE RATIO BASED ON INTERLEAVED RECIRCULATING FREQUENCY SHIFTER	706
<i>Xiangyu Wu ; Bo Liu ; Lijia Zhang ; Yaya Mao ; Xing Xu ; Jianxin Ren ; Bo Tian ; Ying Zhang ; Xiangjun Xin</i>	
TRANSMISSION PERFORMANCE OF 112-GB/S PDM-PAM4 SIGNAL OVER UNREPEATERED RAMAN-AMPLIFIED LINK	709
<i>Kehang Xu ; Jun Tang ; Yuan Li ; Yong Xiao ; Anlin Yi ; Lianshan Yan</i>	
REAL-VALUED OPTICAL I-SCFDM WITH JOINT POST-EQUALIZATION FOR VISIBLE LIGHT COMMUNICATIONS	712
<i>Tiantian Zhang ; Yaojun Qiao ; Zhenshan Zhang ; Ji Zhou ; Yueming Lu ; Fei Su</i>	
CHROMATIC DISPERSION MEASUREMENT OF A TWO-MODE FIBER USING A MODE COUPLER AND OPTICAL TIME-DOMAIN REFLECTOMETER	715
<i>Masaharu Ohashi ; Tomoya Kawasaki ; Yuji Miyoshi ; Hirokazu Kubota ; Ryo Maruyama ; Nobuo Kuwaki</i>	
MITIGATING NONLINEARITY CHARACTERISTICS OF GRAY-CODING SQUARE 8QAM IN UNDERWATER VLC SYSTEM	718
<i>Peng Zou ; Yuanfan Liu ; Fumin Wang ; Nan Chi</i>	
HAMILTONIAN FORMULATION OF CROSS MODE MODULATION	721
<i>Haofan Yang ; Weijin Chen ; Hanwen Hu ; Yuntian Chen ; Jing Xu ; Xinliang Zhang</i>	
POLARIZATION INSENSITIVITY FILTER USING 2D SUB-WAVELENGTH HIGH CONTRAST GRATINGS	724
<i>Wenjing Fang ; Chunyun Yue ; Xinye Fan ; Huihuan Niu ; Xia Zhang ; Hengying Xu ; Nan-Kuang Chen ; Chenglin Bai</i>	
1.3μM BAND FOUR-CHANNEL DIRECTLY MODULATED ADR-DFB LASER ARRAY INTEGRATED WITH MMI COUPLER	727
<i>Gongyuan Zhao ; Gonghai Liu ; Can Liu ; Qiaoyin Lu ; Weihua Guo</i>	
ON-CHIP OPTICAL ATTENUATORS DESIGNED BY ARTIFICIAL NEURAL NETWORKS	729
<i>Zhipeng Chu ; Yingjie Liu ; Jiancheng Sheng ; Liang Wang ; Jiangbing Du ; Ke Xu</i>	
INVERSE-DESIGN-BASED LIGHT VIA FOR MULTI-LAYER PHOTONIC INTEGRATION CIRCUIT	732
<i>Zexin Yu ; Jifang Qiu ; Zhenli Dong ; Li Zheng ; Hongxiang Guo ; Jian Wu</i>	
FREQUENCY-DOMAIN NONLINEAR ESTIMATION AND EQUALIZATION USING INTRA-SYMBOL AVERAGING FOR 40-GB/S/WAVELENGTH LR-PON	735
<i>Junwei Zhang ; Changjian Guo ; Jie Liu ; Xiong Wu ; Maochun Wang ; Dongpeng Zhang ; Liang Wang ; Siyuan Yu</i>	
MULTI-FREQUENCY CURRENT MEASUREMENT SYSTEM BASED ON FIBER BRAGG GRATING AND CANTILEVER BEAM	738
<i>Jiahao Yi ; Zhiguo Zhang ; Luming Li ; Zhehao Yan ; Renzhong Guo ; Chenying Jiang</i>	
ULTRA-BROADBAND POLARIZATION BEAM SPLITTER BASED ON A TAPERED BENT DIRECTIONAL COUPLER	741
<i>Ning Zhao ; Yu He ; Ciyuan Qiu ; Yong Zhang ; Yikai Su</i>	
ALL-OPTICAL INVERTER BASED ON HYBRID SQUARE-RECTANGULAR LASER	744
<i>Fu-Li Wang ; Yong-Zhen Huang ; Yue-De Yang ; Jin-Long Xiao ; You-Zeng Hao</i>	
WIDELY TUNABLE SINGLE-MODE HYBRID SQUARE/RHOMBUS-RECTANGULAR LASERS	747
<i>You-Zeng Hao ; Yong-Zhen Huang ; Fu-Li Wang ; Hai-Zhong Weng ; Yue-De Yang ; Jin-Long Xiao</i>	
TUNABLE MULTIWAVELENGTH BRILLOUIN RANDOM FIBER LASER	750
<i>Zhaoyu Ji ; Yuxiang Deng ; Hongdan Wan ; Zuxing Zhang</i>	
SPECTRAL SCRAMBLING FOR HIGH-SECURITY PAM-8 UNDERWATER VISIBLE LIGHT COMMUNICATION SYSTEM	753
<i>Yingjun Zhou ; Jianyang Shi ; Junwen Zhang ; Nan Chi</i>	

PERFORMANCE ANALYSIS OF LDPC CODES FOR WIRELESS OPTICAL COMMUNICATION SYSTEMS IN DIFFERENT SEAWATER ENVIRONMENTS.....	756
<i>Jingni Zhang ; Yi Yang ; Zhuo Gao ; Yunzhou Zhu</i>	
SPUN HIGH BIREFRINGENCE BISMUTH/ERBIUM CO-DOPED PHOTONIC CRYSTAL FIBRE WITH BROADBAND POLARIZED EMISSION	759
<i>Yanhua Luo ; Yushi Chu ; Kevin Cook ; Ghazal Tafti ; Shuai Wang ; Wenyu Wang ; Yuan Tian ; John Canning ; Gang-Ding Peng</i>	
FIBER-OPTIC ANEMOMETER WITH INTENSITY LINEAR DEMODULATION.....	762
<i>Fang Wang ; Yang Zhang ; Zhihui Duan ; Zhenguo Jing ; Dapeng Zhou ; Wei Peng</i>	
A 4×4 RECONFIGURABLE OPTICAL PROCESSOR	765
<i>Farhad Shokraneh ; Mohammadreza Sanadgol Nezami ; Odile Liboiron Ladouceur</i>	
ON-CHIP FORWARD BANDPASS MODE CONVERSION BASED ON TWO CASCADED BRAGG GRATINGS	768
<i>Rulei Xiao ; Yuechun Shi ; Yong Zhao ; Xiangfei Chen</i>	
DOG IN FOG: KNOWLEDGE-AWARE VIRTUAL NETWORK EMBEDDING IN CLOUD- AND FOG-MIXED OPTICAL DCNS.....	771
<i>Cunqian Yu ; Rongxi He ; Bin Lin ; Jingyu Li</i>	
DESIGNING DEEP LEARNING MODEL FOR ACCURATE VNF SERVICE CHAIN PRE-DEPLOYMENT IN INTER-DC EONS	774
<i>Baojia Li ; Wei Lu ; Siqi Liu ; Zuqing Zhu</i>	
PERFORMANCE OF OPTICAL CORRELATION RECEIVER WITH AN ANALOG INTEGRATION CIRCUIT ON RESIDUAL DISPERSION MITIGATION FOR NYQUIST OTDM.....	777
<i>Shota Maeda ; Kosuke Morimoto ; Shiho Nakata ; Yuji Miyoshi ; Hirokazu Kubota ; Masaharu Ohashi</i>	
THERMAL PROPERTIES OF LUMINESCENCE IN BISMUTH/ERBIUM CO-DOPED OPTICAL FIBRE.....	780
<i>Bowen Zhang ; Mingjie Ding ; Yanhua Luo ; Gang-Ding Peng ; Yushi Chu ; Binbin Yan</i>	
CHARACTERISTIC OF POLARIZATION STATE UNDER THE EFFECTS OF SOURCE PARAMETERS AND ATMOSPHERIC TURBULENCE	783
<i>Ziyang Li ; Ruijie Li ; Anhong Dang</i>	
HIGH SENSITIVITY SENSING MEASUREMENT OF LOW CONCENTRATION OF SOLUTION BASED ON S-TAPERED FIBER	786
<i>Dujuan Yang ; Han Zhu ; Yunxu Sun</i>	
BENDING SENSOR BASED ON TILTED FIBER BRAGG GRATING	789
<i>Zhihui Duan ; Yang Zhang ; Fang Wang ; Zhenguo Jing ; Dapeng Zhou ; Wei Peng</i>	
RESEARCH ON DENOISING ALGORITHM OF SPARSE SIGNAL RECONSTRUCTION IN POLARIZATION MODE DISPERSION MEASUREMENT SYSTEM.....	792
<i>Gong Chen ; Xueguang Yuan ; Yalei Chu ; Yangan Zhang</i>	
A FRAME AVERAGING BASED SIGNAL TRACING (FAST) ALGORITHM FOR OPTICAL CAMERA COMMUNICATIONS.....	795
<i>Liqiong Liu ; Yang Hong ; Lian-Kuan Chen</i>	
CYLINDRICAL VECTOR BEAM FIBER LASER BASED ON PHOTONIC LANTERN.....	798
<i>Yang Xu ; Zuxing Zhang ; Hongdan Wan ; Yan Li</i>	
A PROMISING SPR SENSOR WITH SINGLE MODE- MULTIMODE-SINGLE MODE FIBER EMBEDDING MICROCAVITY	801
<i>Kezhen Rong ; Huifang Chen ; Hai Wang ; Tiantian Chen ; Hao Li ; Xiaoyan Tang</i>	
VISIBLE LIGHT COMMUNICATION BASED INTELLIGENT TRAFFIC LIGHT SYSTEM: DESIGNING AND IMPLEMENTATION.....	804
<i>Ning Wang ; Yang Qiao ; Wuqu Wang ; Suheng Tang ; Jianhua Shen</i>	
ULTRA-NARROW-BAND MULTI-CHANNEL PERFECT ABSORBER BASED ON OPTICAL TAMM STATES IN METAL-DIELECTRIC-METAL WAVEGUID	807
<i>Xiang Wu ; Yunqing Lu ; Jiong Xu ; Ji Xu ; Jin Wang</i>	
DESIGN OF DISTRIBUTED FEED-BACK FIBER LASER BASED AIRBORNE SOUND DETECTOR.....	810
<i>Xiaolei Zhang ; Faxiang Zhang ; Yuanyuan Yang ; Zhiqiang Song ; Jiasheng Ni ; Shaodong Jiang</i>	
STUDY ON DEPENDENCE OF TEMPERATURE ON CO₂ ABSORPTION COEFFICIENT AT 1572.34NM	813
<i>Tao Kaichen ; Wu Xiangnong ; Zhang Xin</i>	
MODE DISPERSION ANALYSIS BASED ON REFRACTIVE INDEX OF GRADED-INDEX MULTIMODE FIBER	817
<i>Yu Zhao ; Sujuan Huang ; Cheng Yan ; Xinyu Shen</i>	

RESEARCH ON FREE-SPACE OPTICAL COMMUNICATION PERFORMANCE UNDER VARIOUS WEATHER CONDITIONS.....	820
<i>Jie Pang ; Shanhong You</i>	
ENHANCED OPTICAL KERR NONLINEARITY OF GRAPHENE/SI HYBRID WAVEGUIDE	823
<i>Qi Feng ; Ting Wang ; Jianjun Zhang</i>	
FLAT SUPERCONTINUUM GENERATION USING A FLUORIDE FIBER PUMPED BY MODE-LOCKED FIBER LASER.....	825
<i>Ye Yu ; Huanhuan Liu ; Wei Song ; Qiao Jiang ; Fufei Pang ; Tingyun Wang</i>	
TEMPERATURE DEPENDENCE OF CUTOFF WAVELENGTH IN BI/ER CO-DOPED FIBER	828
<i>Shuen Wei ; Yanhua Luo ; Gui Xiao ; Desheng Fan ; Yushi Chu ; Bowen Zhang ; Binbin Yan ; Gang-Ding Peng</i>	
PEAK-TO-AVERAGE POWER RATIO SUPPRESSION BASED ON MULTI-STAGE OPTIMAL PHASE (MSOP)-SLM.....	831
<i>Yang Ye ; Mingyi Gao ; Yuanyuan Ma ; Weidong Shao ; Wei Chen ; Yonghu Yan</i>	
THERMAL EMITTER BASED ON ALL-DIELECTRIC THIN-FILM METASURFACE FOR RADIATION COOLING IN HIGH-POWER VERTICAL CAVITY SURFACE EMITTING LASER.....	834
<i>Wenbing Liu ; Wei Wu ; Yonghong Ling ; Jing Luan ; Chunfa Ba ; Li Min ; Lirong Huang</i>	
A SIMPLE ARTIFICIAL NEURAL NETWORK BASED JOINT MODULATION FORMAT IDENTIFICATION AND OSNR MONITORING ALGORITHM FOR ELASTIC OPTICAL NETWORKS.....	837
<i>Qianwu Zhang ; Jian Chen ; Hai Zhou ; Junjie Zhang ; Min Liu</i>	
TEMPERATURE SENSORS OPERATING NEAR THE DISPERSION TURNING POINT OF MICROFIBER BASED TWO-MODE FIBER	840
<i>Fang Fang ; Bing Sun ; Zuxing Zhang ; Lin Zhang ; Jing Xu ; Wei Wei</i>	
SMARTPHONE BASED LSPR BIOSENSOR	843
<i>Qiang Liu ; Yun Liu ; Huizhen Yuan ; Jiabin Wang ; Jianye Guang ; Wei Peng</i>	
A RECONFIGURABLE OPTICAL FREQUENCY COMB GENERATOR WITH 35 FLAT COMB LINES	846
<i>Jinwang Qian ; Mingzheng Lei ; Zhennan Zheng ; Xinlu Gao ; Shanguo Huang</i>	
NOISE-TOLERANT SPIRAL 16-QAM SYSTEM BASED ON CASCADED KALMAN FILTERS.....	849
<i>Yuanyuan Ma ; Mingyi Gao ; Junfeng Zhang ; Yang Ye ; Hongliang Ren ; Yonghu Yan</i>	
FEMTOSECOND DIRECT WRITING OF INTERGRATED MACH-ZEHNDER INTERFEROMETER WITH BRAGG GRATING FOR CURVATURE-TEMPERATURE DISCRIMINATION	852
<i>Peng Wang ; Xuewen Shu ; Yujie Kong ; Zuowei Xu ; Qi Yu</i>	
COMPREHENSIVE STUDY ON PARALLEL TOPOLOGICAL PHOTONIC MIXER.....	856
<i>Ruoming Li ; Jiming Cao ; Wangzhe Li</i>	
HIGHLY RIU-SENSITIVE PLASMONIC METAL-DIELECTRIC-METAL DEVICE WITH TWO SIDE-COUPLED FANO CAVITIES.....	859
<i>Jiong Xu ; Yunqing Lu ; Min Xu ; Ji Xu ; Jin Wang ; Jiajin Zheng</i>	
WIDELY TUNABLE PASSIVELY MODE-LOCKED FIBER LASER BASED ON 45 TILTED FIBER GRATING WITH STRONG POLARIZATION DEPENDENT LOSS.....	862
<i>Bingbing Lu ; Chuanhang Zou ; Qianqian Huang ; Chengbo Mou ; Zhijun Yan ; Lin Zhang</i>	
RECEIVER SENSITIVITY IMPROVEMENT OF LAYERED-ACO-OFDM SYSTEM ENABLED BY LAYERED-DFT/OCT PRECODING TECHNIQUE.....	865
<i>Gang Liu ; Miao Peng ; Cuiwei Liu ; Ming Chen ; Hui Zhou ; Qinghui Chen</i>	
APPLICATION OF NOVEL HIGH EFFICIENCY TWO-PHOTON INDUCED BLUE EMISSION MATERIAL IN BIOLOGICAL IMAGING	868
<i>Xiao Liu ; Nan-Nan Zhang ; Lei Guo ; Zhong-Chao Wei ; Yin-Yin Li ; Qiao-Feng Dai ; Hai-Ying Liu ; Hai-Hua Fan</i>	
INTEGRATING BASEBAND DIGITAL OPTICAL LINK AND SIX-PORT TRANSCEIVER FOR WIRELESS COMMUNICATIONS.....	871
<i>Xiaoxiong Song ; Jianqiang Li ; Yuting Fan ; Feifei Yin ; Yitang Dai ; Kun Xu</i>	
ENHANCED SURFACE PLASMON RESONANCE FIBER SENSOR BASED ON GRAPHENE OXIDE.....	874
<i>Jing Zhao ; Yiping Wang ; Changrui Liao ; Yi Wang ; Jun He</i>	
1.92GHZ L-BAND PASSIVELY HARMONIC MODE-LOCKED ER-DOPED FIBER LASER BASED ON A 45 TILTED FIBER GRATING	877
<i>Yuanda Ling ; Qianqian Huang ; Chuanhang Zou ; Chengbo Mou ; Zhijun Yan ; Lin Zhang</i>	
HIGH-SPEED INTERROGATION OF A FIBER GRATING SENSOR BASED ON WAVELENGTH-TO-TIME MAPPING AND A FABRY-PEROT CONFIGURATION.....	880
<i>Ou Xu</i>	

REAL-TIME OBSERVATION OF PULSATING DISSIPATIVE SOLITONS IN A NORMAL-DISPERSION FIBER LASER	883
<i>Yueqing Du ; Zuowei Xu ; Xuwen Shu</i>	
CORRECTION OF SNAP MICRORESONATORS FABRICATED BY FEMTOSECOND LASER WITH SUB-ANGSTROM PRECISION	886
<i>Qi Yu ; Yueqing Du ; Xuwen Shu ; Michael Sumetsky</i>	
ANALYSIS AND REALIZATION OF PULSE REPLICATION SYSTEM BASED ON ACTIVE FIBER LOOP	889
<i>Hui Gao ; Ye Deng ; Jinping Zhang</i>	
CNN BASED OSNR ESTIMATION METHOD FOR LONG HAUL OPTICAL FIBER COMMUNICATION SYSTEMS	892
<i>Ziyi Wang ; Aiyang Yang ; Peng Guo ; Lihui Feng ; Pinjing He</i>	
LOOP PARAMETERS DESIGNING METHOD FOR OPTICAL PHASE-LOCKED LOOP SYSTEM	895
<i>Shengyao Xu ; Ding Ding ; Yang'An Zhang ; Xueguang Yuan ; Zhengyang Li ; Xuhui Song ; Yongqing Huang</i>	
KILOWATT-LEVEL, MODE-INSTABILITY-FREE, ALL-FIBER AND POLARIZATION-MAINTAINED AMPLIFIER WITH SPECTRAL LINEWIDTH OF 1.8 GHZ	898
<i>Wenchang Lai ; Daren Meng ; Xubao He ; Pengfei Ma ; Rongtao Su ; Pu Zhou</i>	
MODE-LOCKED ERBIUM-DOPED FIBER LASER BASED ON SINGLE-WALL CARBON NANOTUBES AND FIBER FOCUSERS	901
<i>Xinxin Huang ; Xiaorong Gu ; Menglin Liu ; Yixuan Zhu ; Chenxi Jiang ; Hongqiao Zhang ; Chongjun He ; Youwen Liu</i>	
LARGE 10-DB BANDWIDTH AND LOW INSERTION LOSS SILICON DUAL-RING MODULATOR	904
<i>Hongxia Zhang ; Xinhong Jiang ; Ciyuan Qiu</i>	
QUALITATIVE AND QUANTITATIVE DETECTION OF ETHYL CARBAMATE IN WINE USING SURFACE-ENHANCED RAMAN SPECTROSCOPY	907
<i>Haiyan Qi ; Huacai Chen ; Li Jiang</i>	
STUDY OF AN IN-LINE FIBER MACH-ZEHNDER INTERFEROMETER WITH PEANUT-SHAPE STRUCTURE FOR REFRACTIVE INDEX SENSING	910
<i>Fangda Yu ; Peng Xue ; Jie Zheng</i>	
IMPLEMENTATION OF NORTHBOUND INTERFACE IN MULTI-DOMAIN COORDINATE CONTROL FRAMEWORK	913
<i>Wenqi Bai ; Yihong Hu ; Guochu Shou ; Yaqiong Liu</i>	
TIME-STRETCH BASED PHOTONIC ANALOG-TO-DIGITAL CONVERTORS FOR SPECTRUM DETECTION	916
<i>Qiang Zhao ; Ziyu Liu ; Naijin Liu</i>	
A VISIBLE LIGHT SINGLE-CARRIER FREQUENCY DOMAIN MMSE BASED ON MOBILE LOCALIZATION	919
<i>Jiayuan Wang ; Jian Chen</i>	
HIGHLY STABLE OPTICAL VECTOR ANALYSIS BASED ON POUND-DREVER-HALL TECHNIQUE FOR FABRY-PEROT INTERFEROMETERS MEASUREMENT	922
<i>Long Ye ; Zenghui Chen ; Jian Dai ; Tian Zhang ; Kun Xu</i>	
VISIBLE LIGHT BROADBAND ABSORBER BASED ON SILICON NANO-RESONATORS	925
<i>Guo-Dong Liu ; Di Zhang ; Jin Xiang ; Qiao-Feng Dai ; Hai-Hua Fan ; Hai-Ying Liu</i>	
KALMAN FILTERING FOR VLC CHANNEL ESTIMATION OF ACO-OFDM SYSTEMS	928
<i>Eman Shawky ; Mohamed A. El-Shimy ; Hossam M. H. Shalaby ; Amr Mokhtar ; El-Sayed A. El-Badawy</i>	
A NOVEL PHASED-SHIFTED BRAGG GRATING FOR BLOCH SURFACE WAVES	931
<i>Qi-Qin Wei ; Jing Xiao</i>	
DYNAMIC ORCHESTRATION MECHANISM OF SERVICE FUNCTION CHAIN IN HYBRID NFV NETWORKS	934
<i>Xiao Liang ; Xiaohong Huang ; Dandan Li ; Tianle Yang</i>	
DYNAMIC POLLING SEQUENCE ARRANGEMENT FOR LOW-LATENCY WIRELESS LAN	937
<i>Yunxin Lv ; Lihua Ruan ; Maluge Pubuduni Imali Dias ; Elaine Wong ; Ye Feng ; Ning Jiang ; Kun Qiu</i>	
PREDICTING OPTICAL POWER EXCURSIONS IN ERBIUM DOPED FIBER AMPLIFIERS USING NEURAL NETWORKS	940
<i>Maria Freire ; Sébastien Mansfeld ; Djamel Amar ; Franck Gillet ; Antoine Lavignotte ; Catherine Lepers</i>	
SELF-BENDING IMAGE TRANSMISSION WITH HELICAL BEAMS	943
<i>Wei Lin ; Yuanhui Wen ; Yujie Chen ; Yanfeng Zhang ; Lin Liu ; Chunchuan Yang ; Lidan Zhou ; Siyuan Yu</i>	
OPTICAL SIGNAL-TO-NOISE RATIO MONITORING BASED ON BACK-PROPAGATION NETWORK WITH AN AUTOENCODER	945
<i>Yuxiao Guo ; Muguang Wang ; Hongqian Mu ; Mengyao Han ; Yan Liu</i>	

STABLE DARK PULSES PRODUCED BY THE MOS2 SATURABLE ABSORBER MODE-LOCKED FIBER LASER.....	948
<i>Qianchao Wu ; Yong Yao ; Han Zhu ; Dandan Xu ; Rui Wang ; Yanfu Yang ; Jiajun Tian</i>	
BANDWIDTH CALENDARING ALGORITHM OVER SOFTWARE DEFINED PACKET TRANSPORT NETWORK	951
<i>Yafei Wang ; Lei Wang ; Liqian Wang ; Zhiguo Zhang ; Xue Chen</i>	
INTEGRATED NANOANTENNA GRATINGS FOR PLANAR HOLOGRAPHIC SIGNALISATION SYSTEM.....	954
<i>Benjamin Leroy ; Giovanni Magno ; David Barat ; Laetitia Pradere ; Beatrice Dagens</i>	
DEVELOPMENT OF WIRELESS SPECIFIC MOSQUITO COUNTER BY OPTICAL TECHNOLOGY	957
<i>Jinlei Wang ; Xun Wang ; Ying Li ; Zheng Duan ; Sune Svanberg ; Guangyu Zhao</i>	
OPTICAL DETECTION OF OTITIS MEDIA USING MODIFIED SPECTROSCOPIC OTOSCOPE.....	960
<i>Lingna Hu ; Wansha Li ; Huiying Lin ; Ying Li ; Katarina Svanberg ; Guangyu Zhao ; Hao Zhang ; Sune Svanberg</i>	
RECURSIVE NEURAL NETWORK BASED RRH TO BBU RESOURCE ALLOCATION IN 5G FRONTHAUL NETWORK.....	964
<i>Bo Tian ; Qi Zhang ; Xiangjun Xin ; Qinghua Tian ; Xiangyu Wu ; Ying Tao ; Yufei Shen ; Guixing Cao ; Naijin Liu</i>	
CASCADED DOUBLE-RING ENHANCED ON-CHIP FOURIER-TRANSFORM SPECTROMETER.....	967
<i>Qiongchan Shao ; Mingyu Li ; Jian-Jun He</i>	
HYBRID POLYMER/SINX ENHANCED GAIN LIGHT-EMITTER.....	970
<i>Andi Zhang ; Yujie Chen ; Lin Liu ; Yanfeng Zhang ; Zhiren Qiu ; Siyuan Yu</i>	
EXPERIMENTAL DEMONSTRATION OF FLEXIBLE HARDWARE ACCELERATION IN 5G MEC INFRASTRUCTURE.....	972
<i>Qiang Tang ; Rentao Gu ; Geng Zhang ; Shuai Wang ; Yanan Wang ; Yang Wang ; Yuefeng Ji</i>	
REAL-TIME IMPLEMENTATION OF PARALLEL DIGITAL TIMING RECOVERY ALGORITHM WITH REDUCED COMPLEXITY.....	975
<i>Ruibin Hao ; Yan Li ; Xiaodong Wang ; Jian Wu ; Jifang Qiu ; Xiaobin Hong</i>	
AN OPTICAL FIBER HYDROGEN CONCENTRATION SENSOR BASED ON MACH-ZEHNDER INTERFEROMETER COATED WITH A FILM OF PALLADIUM	978
<i>Jiaqi Gong ; Changyu Shen ; Zhiqiang Sun ; Shaojie Shuai ; Tingting Lang ; Yike Xiao</i>	
EXPERIMENTAL STUDY ON CHARACTERISTIC PARAMETERS OF RED BLOOD CELLS USING THE OPTICAL TWEEZERS SYSTEM.....	981
<i>Ying Wu ; Chen Zhu ; Anping Ruan ; Ying Liu ; Caiqin Han</i>	
BIAS MODULATION CHARACTERISTIC ANALYSIS USING A UNI-TRAVELING-CARRIER PHOTODIODE.....	984
<i>Xiaohui Xu ; Yongqing Huang ; Tao Liu ; Xiaofeng Duan ; Kai Liu ; Xiaomin Ren</i>	
PERFORMANCE ENHANCEMENT OF A BROADBAND POLARIZATION ROTATOR BY USING MODIFIED MODE CONVERTERS	987
<i>Chang Liu ; Jifang Qiu ; Ye Tian ; Hongxiang Guo ; Xiaobin Hong ; Jian Wu</i>	
TRANSCEIVER IN-PHASE AND QUADRATURE IMBALANCE MONITORING BY TWO STAGE MIMO EQUALIZERS.....	990
<i>Junpeng Liang ; Yangyang Fan ; Zhenning Tao ; Hisao Nakashima ; Takeshi Hoshida</i>	
EIGENVECTOR BASIS EXPANSION-BASED PHASE NOISE SUPPRESSION METHOD FOR COHERENT NYQUIST-WDM-PON.....	994
<i>Xin Qin ; Chuanchuan Yang ; Ziyu Wang</i>	
OPTIC FIBER DROPLET WEIGHING SENSOR BASED ON MACH-ZEHNDER INTERFEROMETER CASCADED BOWKNOT TYPE TAPER.....	997
<i>Shaojie Shuai ; Yinuo Xu ; Zhiqiang Sun ; Jiaqi Gong ; Tingting Lang ; Changyu Shen</i>	
DYNAMIC BANDWIDTH SCHEDULING FOR IP OVER FC NETWORKS	1000
<i>Shaojun Wu ; Yueying Zhan ; Kuangyi Qiao ; Jianhua He ; Xiang Chang ; Liqian Wang</i>	
HEART RATE ESTIMATION BASED ON A NEW SCHEME DURING INTENSIVE EXERCISE FROM PHOTOPLETHYSMOGRAPHY	1003
<i>Xuhui Song ; Xueguang Yuan ; Yang'An Zhang ; Chen Gong ; Shengyao Xu ; Yongqing Huang</i>	
A MARKETPLACE FOR REAL-TIME VIRTUAL PON SHARING.....	1006
<i>Nima Afraz ; Marco Ruffini</i>	
SPECTRUM TAILORED MULTICAST FLOW AGGREGATION SCHEME IN ELASTIC OPTICAL DATA CENTER NETWORK	1009
<i>Xiaolei Xu ; Xian Zhang ; Haijing Hou ; Haiyan Shen</i>	

FIBER OPTIC SENSOR BASED ON MZI TO MEASURE URINE SUGAR AND MICRO VELOCITY SIMULTANEOUSLY	1012
<i>Yike Xiao ; Changyu Shen ; Shaojie Shuai ; Jiaqi Gong ; Zuxu Liu ; Zhiqiang Sun</i>	
CRITERION OF COMPLETE CHAOS SYNCHRONIZATION FOR DIVERSE THREE-NODE VCSEL NETWORKS WITH COUPLING	1015
<i>Dongzhou Zhong ; Zhenzhen Xiao ; Guangze Yang</i>	
CONSOLIDATING VIRTUAL DATA CENTERS WITH NEGATIVE LOAD CORRELATIONS TO ALLEVIATE PERFORMANCE DEGRADATION DUE TO LOAD BURSTINESS (INVITED)	1018
<i>Chao Guo ; Gangxiang Shen ; Yonghu Yan ; Wei Chen ; Sanjay Kumar Bose</i>	
BENEFITS OF EMPLOYING RECONFIGURABLE AND HYBRID INTERCONNECTION NETWORK FOR HPC SYSTEM	1021
<i>Yu Shang ; Bingli Guo ; Xin Li ; Shan Yin ; Shanguo Huang ; Weiguo Ju ; Yuan Yuan</i>	
D-GLUCOSE SENSING FIBER OPTIC D-TYPE MICROBIOSENSOR	1024
<i>M. S. Aruna Gandhi ; Xuanyi Liu ; Qian Li</i>	
HIGH-RESOLUTION FIBER OPTIC SEISMIC SENSOR ARRAY FOR INTRUSION DETECTION OF SUBWAY TUNNEL	1027
<i>Jiantao Huang ; Wentao Zhang ; Wenhui Huang ; Wenzhu Huang ; Lixin Wang ; Yingbo Luo</i>	
CW ASSISTED PICOSECOND PULSE PUMPED SUPERCONTINUUM IN SILICON-ON-INSULATOR WAVEGUIDE	1030
<i>Guangkuo Li ; Qian Li</i>	
A HIGH SENSITIVE BOREHOLE STRAINMETER BASED ON FIBER BRAGG GRATING	1032
<i>Liu Aichun ; Fan Wenjuan ; Fan Lianglong</i>	
PERFORMANCE IMPROVEMENT OF IM-DD OFDM SYSTEMS BY NONUNIFORM DAC OUTPUT LEVELS	1036
<i>Daojun Xue ; Weizhong Li ; Zhixue He ; Ming Luo ; Haibo Li ; Xiang Li</i>	
POWER-TRANSFER-FUNCTION OPTIMIZATION FOR NONLINEAR-OPTICAL LOOP MIRROR-BASED MULTILEVEL AMPLITUDE REGENERATOR	1039
<i>Feng Wen ; Biao Guo ; Baojian Wu</i>	
SEMI-FREQUENCY-LOCKING AND BI-DYNAMIC RESULTED FROM CHAOS-CONTROL OF A DUAL-RING ERBIUM-DOPED FIBER LASER USING DOUBLE-PARAMETER ANTI-PHASE	1042
<i>Yan Senlin</i>	
TOPOLOGICAL TRANSITION METASURFACES FOR MANIPULATING TERAHERTZ SURFACE WAVE PROPAGATION	1045
<i>Peixia Zheng ; Quan Xu ; Xiaoqiang Su ; Chunmei Ouyang ; Jiaguang Han ; Weili Zhang</i>	
HALF-OPEN CAVITY RANDOM FIBER LASER BASED ON CHIRPED-FIBER BRAGG GRATING ARRAY WRITTEN IN ERBIUM-DOPED FIBER	1048
<i>Zhaoxin Liu ; Jing Yang ; Lifeng Bao ; Chengrong Shen ; Ruifu Huang ; Xinyong Dong</i>	
TIME DELAY ESTIMATION BASED ON THE SECOND CORRELATION ALGORITHM AND WAVELET TRANSFORMATION	1051
<i>Lingwei Yang ; Wei Wei ; Zhangweiyi Liu ; Xiaocheng Wang ; Nan Deng ; Yi Dong</i>	
A CODE-FREE OPTICAL UNDERSAMPLING TECHNIQUE FOR BROADBAND MICROWAVE SPECTRUM MEASUREMENT	1054
<i>Guangyu Gao ; Xueshuang Xiang ; Qijun Liang ; Naijin Liu</i>	
THE TACTILE INTERNET: WHERE DO WE GO FROM HERE?	1057
<i>Martin Maier</i>	
FUNDAMENTAL-MODE PHASE-MATCHED THIRD HARMONIC AND TRIPLET PHOTON GENERATION BASED ON HETEROGENEOUS MODE INTERACTION	1060
<i>Tianye Huang ; Jianxing Pan ; Perry Shum Ping ; Gilberto Brambilla ; Zhuo Chen ; Xuguang Shao</i>	
FADING NOISE REDUCTION UTILIZING MULTI-WAVELENGTH SCHEME IN PHASE INTERROGATION BASED PHASE-SENSITIVE OPTICAL TIME DOMAIN REFLECTOMETRY	1063
<i>Chaoli Liang ; Yang Lu ; Xueliang Zhang ; Zhou Meng</i>	
PROGRAMMABLE ORBITAL ANGULAR MOMENTUM(OAM) MODE MULTIPLEXER BASED ON MULTI-PLANE LIGHT CONVERSION(MPLC)	1066
<i>Xingguo Xiao ; Yan Li ; Donghao Zheng ; Xinglin Zeng ; Wei Li ; Jian Wu</i>	
62 KM COTDR FOR LONG-DISTANCE DISTRIBUTED TEMPERATURE SENSING WITH A NOISE-REDUCTION SIGNAL PROCESSING METHOD	1069
<i>Muping Song ; Ying Wu ; Weiji Zhu ; Shouwang Zhuang ; Yixuan Wang</i>	
CROSSTALK IMPACTS ON HOMOGENEOUS WEAKLY-COUPLED MULTICORE FIBER BASED IM/DD SYSTEM	1072
<i>Lin Gan ; Jiajun Zhou ; Liang Huo ; Li Shen ; Chen Yang ; Weijun Tong ; Songnian Fu ; Ming Tang ; Deming Liu</i>	

WHICH FEATURES MOST IMPACT: PREDICTION OF ANN-BASED LIGHTPATH QUALITY OF TRANSMISSION?	1075
<i>Longfei Li ; Gangxiang Shen ; Xiaodong Fu ; Shuiping Jie ; Sanjay Kumar Bose</i>	
NETWORK PERFORMANCE ANALYSIS OF SPATIAL DIVISION MULTIPLEXING ENABLED PACKET SWITCHING NETWORKS	1078
<i>Tao Jiang ; Jiajia Chen ; Rui Lin ; Ming Tang</i>	
NOVEL PHASE DIFFERENCE SIGNAL PROCESSING TECHNOLOGY IN SURFACE PLASMON RESONANCE SENSING SYSTEM	1081
<i>Zhenguo Jing ; Yueying Liu ; Bin Wang ; Peng Song ; Ang Li ; Wei Peng</i>	
PASSIVELY Q-SWITCHED ER-DOPED FIBER LASER BASED ON NBSE2 QUANTUM DOT SATURABLE ABSORBER	1084
<i>Yihuan Shi ; Wenjia Li ; Wei Lü ; Qiao Wen</i>	
VECTOR LINEAR PREDICTION BASED TWO-DIMENSIONAL QUANTIZATION FOR DIGITIZED RADIO-OVER-FIBER SYSTEM	1087
<i>Yi Guo ; Jia Ye ; Lianshan Yan ; Wei Pan ; Xihua Zou ; Hui Yang</i>	
PULSE WIDTH TUNABLE PASSIVELY Q-SWITCHED FIBER LASER WITH PTSE2 SATURABLE ABSORBER	1090
<i>Kang Zhang ; Ming Feng ; Yangyang Ren ; Jie Yang ; Fang Liu ; Xiaoqing Yan ; Feng Song ; Jianguo Tian</i>	
LUMINESCENCE CHARACTERISTICS OF PBS SEMICONDUCTOR IN SILICA OPTICAL FIBER	1093
<i>Jiajia Zheng ; Yanhua Dong ; Xiangping Pan ; Caiyun Su ; Jianxiang Wen ; Fufei Pang ; Zhenyi Chen ; Tingyun Wang</i>	
HIGH-Q OPTICAL FILTER BASED ON MULTI-NANO HOLE MICRO-RING RESONATOR	1096
<i>Nishan Wu ; Li Xia</i>	
EFFECT OF THE YB3+ ON FLUORESCENCE LIFETIME OF ER-DOPED SILICA OPTICAL FIBER	1098
<i>Qian Wang ; Jianxiang Wen ; Fufei Pang ; Zhenyi Chen ; Yanhua Luo ; Gang-Ding Peng ; Tingyun Wang</i>	
EFFECTIVE UTILIZATION OF TRANSPONDER IN ELASTIC CD-ROADM OPTICAL NETWORKS WITH TRAFFIC GROOMING	1101
<i>Shengyu Zhang ; Min Zhu ; Qin Sun ; Guixin Li ; Bin Chen</i>	
OPTIMIZED ANN TRAINING STRATEGY FOR FAST AND ACCURATE FIBER BRILLOUIN FREQUENCY SHIFT CALCULATION	1104
<i>Yongxin Liang ; Richeng Zhu ; Zinan Wang</i>	
TUNABLE TERAHERTZ REFLECTIVE LINEAR POLARIZATION CONVERTOR BASED ON OVAL-SHAPE-PERFORATED GRAPHENE METASURFACE	1107
<i>Hongtao Zhang ; Yongzhi Cheng</i>	
HIGH SENSITIVITY OPTICAL FIBER TEMPERATURE SENSOR BASED ON ACTIVE DOUBLE-PEANUT FIBER STRUCTURE	1111
<i>Jijing Chen ; Yao Chen ; Peiyuan Wang ; Jie Wang ; Hongdan Wan ; Zuxing Zhang</i>	
PULSE DYNAMICS IN SPATIOTEMPORAL MODE-LOCKED MULTIMODE FIBER LASERS	1114
<i>Xiaosheng Xiao ; Yihang Ding ; Changxi Yang</i>	
WIDEBAND AND POLARIZATION-INSENSITIVE BAND-REJECTION FILTER REALIZED BY USING TWO CASCADED HELICAL LONG-PERIOD FIBRE GRATINGS	1117
<i>Chengliang Zhu ; Hua Zhao ; Hongpu Li</i>	
HIGHLY LINEAR GRAPHENE MODULATOR BASED ON SILICON WAVEGUIDE FOR INTEGRATED MICROWAVE PHOTONICS	1120
<i>Yuansheng Tao ; Haowen Shu ; Zhennan Wu ; Ming Jin ; Xingjun Wang</i>	
THRESHOLD BASED PRUNED RETRAINING VOLTERRA EQUALIZATION FOR PAM-4 100 GBPS VCSEL AND MMF BASED OPTICAL INTERCONNECTS	1123
<i>Ling Ge ; Wenjia Zhang ; Chenyu Liang ; Zuyuan He</i>	
MEASUREMENT OF CROSSTALK BETWEEN LP01 AND LP11 MODES IN A TWO-MODE FIBER LINK BY USING BACKSCATTERED POWER	1126
<i>Masaharu Ohashi ; Kouhei Omoto ; Yuji Miyoshi ; Hirokazu Kubota</i>	
A NOVEL DYNAMIC BANDWIDTH ALLOCATION ALGORITHM FOR NG-PON BASED ON QOS AND SLA	1129
<i>Xing Xu ; Bo Liu ; Lijia Zhang ; Yaya Mao ; Xiangyu Wu ; Jianxin Ren ; Bo Tian ; Ying Zhang ; Xiangjun Xin</i>	
TERAHERTZ GENERATION AND MEASUREMENTS WITH AGGASE2 CRYSTAL	1132
<i>Qijun Liang ; Peng Qin ; Naijin Liu</i>	
PROBABILISTICALLY SHAPED SIGNALING AND MACHINE LEARNING DETECTION FOR OPTICAL INTERCONNECTION	1135
<i>Jiangbing Du ; Lin Sun ; Guoyao Chen ; Chang Wang ; Zuyuan He</i>	

A DISCRETE FOURIER TRANSFORM-BASED METHOD FOR NYQUIST SIGNAL SHAPING IN VLC-SCFDE SYSTEM.....	1136
<i>Zhihua Zhou ; Jing He ; Qinghui Chen ; Jie Ma</i>	
SENSITIVITY-ENHANCED FABRY-PEROT FILLED WITH PDMS TEMPERATURE SENSOR BASED ON VERNIER EFFECT	1139
<i>Leyi Hou ; Ben Xu ; Juan Kang ; Chunliu Zhao ; Shangzhong Jin</i>	
YTTRIUM ALUMINOSILICATE (YAS) FIBER WITH HEAVILY DOPED OF ND FOR SINGLE FREQUENCY LASER.....	1142
<i>Yeming Zhang ; Jianrong Qiu</i>	
FAST, NOISE-FREE MEMORY FOR PHOTON SYNCHRONIZATION AT ROOM TEMPERATURE	1144
<i>Eilon Poem ; Ran Finkelstein ; Ohad Michel ; Ohr Lahad ; Ofer Firstenberg</i>	
RANDOM LASER WITH ERBIUM-DOPED FIBER AND FS-LASER INTRODUCED RANDOM FIBER GRATING	1151
<i>Jingxuan Song ; Xinyong Dong ; Ziyang Guo ; Ben Xu ; Dongning Wang</i>	
MACHINE LEARNING DETECTION FOR DMT MODULATED 112-GBPS VCSEL-MMF OPTICAL INTERCONNECTION	1154
<i>Chang Wang ; Guoyao Chen ; Haoyang Wang ; Lin Sun ; Jiangbing Du ; Zuyuan He ; Ke Xu ; Bo Liu</i>	
GENERATION OF PHASE-CODED MICROWAVE SIGNALS WITH A TUNABLE FREQUENCY MULTIPLICATION FACTOR	1157
<i>Mengxu Chang ; Yang Chen</i>	
SVM CLASSIFICATION COMPARISON FOR QAM MODULATED OPTICAL INTERCONNECTION	1160
<i>Chang Wang ; Guoyao Chen ; Haoyang Wang ; Lin Sun ; Jiangbing Du ; Zuyuan He ; Ke Xu ; Bo Liu</i>	
A TUNABLE MULTI-WAVELENGTH FIBER LASER BASED ON POLARIZATION MAINTAINING MICROFIBER	1163
<i>Yufang Chen ; Yudan Zhang ; Jijing Chen ; Jie Wang ; Peiyuan Wang ; Hongdan Wan ; Zuxing Zhang</i>	
RESEARCH ON TUNABLE EVM DIGITAL SIGNAL GENERATION SYSTEM	1168
<i>Qinghua Yu ; Bin Qiu ; Xiaoqing Shen ; Si Chen ; Wei Xia</i>	
DUAL-WAVELENGTH FUNCTIONAL METADEVICES USING INDIUM-TIN-OXIDE IN MODULARIZATION DESIGN	1171
<i>Jing Luan ; Wenbing Liu ; Jifei Ding ; Yonghong Ling ; Lirong Huang</i>	
MODIFIED DECISION-DIRECTED CARRIER RECOVERY LOOP FOR 16-QAM SIGNALS	1174
<i>Marwa Kazdoghli Lagha ; Pascal Scalart ; Robin Gerzaguat ; Laurent Bramerie ; Arnaud Carer</i>	
BANDWIDTH TUNABLE, DISPERSION-MANAGED MODE-LOCKED THULIUM/HOLMIUM FIBER LASER.....	1177
<i>Hanning Chen ; Yafei Meng ; Yao Li ; Ruihong Dai ; Jiarong Qin ; Yongbing Xu ; Fengqiu Wang</i>	
RELATIVE HUMIDITY SENSOR BASED ON MOLYBDENUM DISULFIDE NANOSHEETS MODIFIED MICROFIBER COUPLER.....	1179
<i>Yuting Bai ; Yiping Miao ; Mingxin Liu ; Hongmin Zhang ; Bin Li ; Xiaoping Yang ; Jianquan Yao</i>	
BEND-INSENSITIVE SMALL CORE DIAMETER GRADED-INDEX FIBER COMPATIBLE FOR BOTH MULTIMODE TRANSMISSION AND SINGLE-MODE TRANSMISSION.....	1182
<i>Wufeng Xiao ; Rong Huang ; Runhan Wang ; Lei Shen ; Tiejun Wang ; Jie Luo</i>	
BLACK PHOSPHORUS-FILM WITH AN IMPROVED DROPCASTING METHOD FOR LARGE PULSE ENERGY AT 1.5 μM.....	1185
<i>Wei Song ; Huanhuan Liu ; Qiao Jiang ; Ye Yu ; Fufei Pang ; Tingyun Wang</i>	
EXCITATION AND TRANSMISSION OF 12 OAM MODES IN 3.7-KM-LONG RING FIBER WITH HIGH REFRACTIVE INDEX DIFFERENCE	1188
<i>Junfeng Yang ; Huanhuan Liu ; Jianxiang Wen ; Fufei Pang ; Na Chen ; Zhenyi Chen ; Tingyun Wang</i>	
DYNAMIC SDN CONTROLLER PLACEMENT IN ELASTIC OPTICAL DATACENTER NETWORKS.....	1191
<i>Yong Liu ; Huaxi Gu ; Xiaoshan Yu ; Jiaying Zhou</i>	
REAL-TIME FPGA DEMONSTRATION OF LOW-LATENCY ADAPTIVE FRONTHAUL COMPRESSION BASED ON ADAPTIVE DIFFERENTIAL PULSE CODE MODULATION.....	1194
<i>Paikun Zhu ; Yuki Yoshida ; Ken-Ichi Kitayama</i>	
RESILIENCE AWARE TOPOLOGY FORMATION IN FSO-BASED FRONTHAUL/BACKHAUL NETWORKS.....	1197
<i>Zhiqun Gu ; Jiawei Zhang ; Yuefeng Ji</i>	
DEMONSTRATION OF OPTICAL CHANNEL DE-AGGREGATION FOR 8QAM SIGNAL USING FWM IN HNLF	1200
<i>Hong Liu ; Hongxiang Wang ; Meitong Yu ; Yuefeng Ji</i>	

A LONG-RANGE FIBER-OPTIC RAMAN DISTRIBUTED TEMPERATURE SENSOR BASED ON DUAL-SOURCE SCHEME AND RZ SIMPLEX CODING.....	1203
<i>Gaoyu Dai ; Xinyu Fan ; Zuyuan He</i>	
SILICON PHOTONIC WAVELENGTH (DE-)MULTIPLEXER FOR LOW-LOSS FLAT-PASSBAND DWDM APPLICATIONS.....	1206
<i>Xin Fu ; Hao Jia ; Sizhu Shao ; Xiongfeng Fang ; Lei Zhang ; Lin Yang</i>	
EFFICIENT AERIAL RELAYS DEPLOYMENT IN FSO-BASED BACKHAUL NETWORKS.....	1208
<i>Yuhang Zhou ; Jiawei Zhang ; Zhiqun Gu ; Yuefeng Ji</i>	
DESIGNER ORIENTED ANALYSIS OF AN ALL-OPTICAL BINARY DELTA SIGMA MODULATOR.....	1211
<i>Ashish Bhatt ; Azeemuddin Syed ; Arpit Khandelwal</i>	
MULTIPLEXING C-BAND QUANTUM KEY DISTRIBUTION WITH O-BAND CLASSICAL OPTICAL COMMUNICATION OVER COMMON OPTICAL FIBER AT METRO ACCESS DISTANCE.....	1214
<i>Yi Qian ; Xiangyu Lin ; Xiaobao Hu</i>	
PERFORMANCE ANALYSIS OF OCDMA-WDM-PON SYSTEM WITH HYPERCHAOTIC SEQUENCES.....	1218
<i>Liwei Yang ; Suqi Shi ; Wenjie Zhang</i>	
APPLICATION OF POLARIZATION-MAINTAINING FIBER IN SEMICONDUCTOR SCANNING LASER FIBER FP SENSING SYSTEM.....	1221
<i>Ang Li ; Zhenguo Jing ; Yueying Liu ; Zhiyuan Huang ; Dapeng Zhou ; Wei Peng</i>	
OPTICAL FIBER SENSING SYSTEM FOR ONLINE MONITORING WIND-INDUCED VIBRATION ON POWER TRANSMISSION TOWER SURVEY.....	1224
<i>Yinggang Nan ; Wenping Xie ; Li Min ; Shunshuo Cai ; Xiaoyong Chen ; Tuan Guo</i>	
HIGH FREQUENCY RESOLUTION X-BAND FREQUENCY SYNTHESIZER BASED ON A PHASE-LOCKED OPTOELECTRONIC OSCILLATOR.....	1228
<i>Huanfa Peng ; Yongchi Xu ; Rui Guo ; Huayang Du ; Jingbiao Chen ; Zhangyuan Chen</i>	
NOVEL PHASE ESTIMATION SCHEME BASED ON SUPPORT VECTOR MACHINE FOR MULTIBAND-CAP VISIBLE LIGHT COMMUNICATION SYSTEM.....	1231
<i>Wenqing Niu ; Yinaer Ha ; Nan Chi</i>	
HIGH SPEED WDM-PON TECHNOLOGY FOR 5G FRONTHAUL NETWORK.....	1234
<i>Dezhi Zhang ; Du Zhe ; Ming Jiang ; Jun Zhang</i>	
GIANT BRIGHT PULSES GENERATION IN AN ANOMALOUS DISPERSION ERBIUM-DOPED FIBER LASER WITH A LONG CAVITY.....	1237
<i>Peiyun Cheng ; Xuwen Shu ; Yueqing Du</i>	
TWO-LAYER ERBIUM DOPED ANNULAR PHOTONIC CRYSTAL FIBER AMPLIFIER FOR ORBITAL ANGULAR MOMENTUM MULTIPLEXING SYSTEM.....	1240
<i>Di Han ; Hu Zhang ; Lixia Xi ; Xiaoguang Zhang ; Wenbo Zhang ; Xianfeng Tang</i>	
GENERATION OF OAM MODES BY USING TAPERED LENSED SINGLE MODE FIBER.....	1243
<i>Wei Song ; Junfeng Yang ; Huanhuan Liu ; Fufei Pang ; Haoqiang Zheng ; Jianxiang Wen ; Na Chen ; Xianglong Zeng ; Tingyun Wang</i>	
COST AWARE MOBILE EDGE COMPUTING HIERARCHICAL DEPLOYMENT IN OPTICAL INTERCONNECTION NETWORK.....	1246
<i>Zhen Liu ; Jiawei Zhang ; Yuefeng Ji</i>	
DOUBLE CLADDING FIBER FOR ACOUSTIC VIBRATION SENSING.....	1249
<i>Guanghui Sui ; Huanhuan Liu ; Fufei Pang ; Jiajing Cheng ; Tingyun Wang</i>	
ENHANCING LASER PHASE-NOISE IMMUNITY OF DISTRIBUTED VIBRATION SENSOR BY PHASE-EXTRACTION F-OTDR.....	1252
<i>Yuying Shao ; Huanhuan Liu ; Peng Peng ; Fufei Pang ; Guoqin Yu ; Zhen Chen ; Na Chen ; Tingyun Wang</i>	
CROSSTALK-REDUCED OCDM SYSTEM USING TIME-EXTENDED MULTI-LEVEL QAM-BASED OPTICAL CODES.....	1255
<i>Takahiro Kodama ; Gabriella Cincotti</i>	
ROBUST CONTROLLABLE FD-FWM BASED MICRO-COMBS.....	1258
<i>Hualong Bao ; Andrew Cooper ; Luigi Di Lauro ; Maxwell Rowley ; Benjamin Wetzel ; Sai Tak Chu ; Dave J Moss ; Roberto Morandotti ; Brent E. Little ; Marco Peccianti ; Alessia Pasquazi</i>	
DEMONSTRATION OF KEY GENERATION SCHEME BASED ON FEATURE EXTRACTION OF OPTICAL FIBER CHANNEL.....	1261
<i>Xiaokun Yang ; Yajie Li ; Guanjun Gao ; Yongli Zhao ; Huibin Zhang ; Jie Zhang</i>	
ALL-OPTICAL PHYSICAL-LAYER NETWORK CODING BASED ON FOUR WAVE MIXING IN SEMICONDUCTOR OPTICAL AMPLIFIER.....	1264
<i>Yueying Zhan ; Yuebing Zhu ; Shaojun Wu</i>	

SCALABLE 2×2 MULTIMODE SWITCH FOR MODE-MULTIPLEXED SILICON PHOTONICS INTERCONNECTS	1267
<i>Rubana Bahar Priti ; Farhad Shokrane; Odile Liboiron-Ladouceur</i>	
K-NEAREST NEIGHBORS CLASSIFIER FOR FIELD BIT ERROR RATE DATA	1270
<i>Stéphanie Allogba ; Christine Tremblay</i>	
EFFICIENT GENERATION OF HIGH-ORDER MODES FROM ALL FEW-MODE FIBER LASERS	1273
<i>Teng Wang ; Ao Yang ; Fan Shi ; Yiping Huang ; Jianxiang Wen ; Xianglong Zeng</i>	
ORTHOGONAL MODE-SWITCHING FIBER LASER BASED ON ACOUSTICALLY-INDUCED FIBER GRATING	1276
<i>Linghao Meng ; Jiafeng Lu ; Fan Shi ; Fufei Pang ; Xianglong Zeng</i>	
PERFORMANCE ANALYSIS OF LDPC IN SPATIALLY MULTIPLEXED MIMO UVC SYSTEM	1278
<i>Yong Zuo ; Lingchao Meng ; Feiyu Li ; Jian Wu ; Junyi Zhang ; Jinnan Zhang</i>	
ON THE FREQUENCY TUNABILITY OF DISSIPATIVE KERR SOLITON MICROCOMBS	1281
<i>Boyang Wang ; Wenwen Cui ; Yong Geng ; Heng Zhou ; Kun Qiu</i>	
JOINT COMMUNICATION AND RANGING SYSTEM BASED ON CHAOTIC LIGHT	1284
<i>Xinyu Dou</i>	
ENERGY EFFICIENT PLACEMENT OF BASEBAND FUNCTIONS AND MOBILE EDGE COMPUTING IN 5G NETWORKS	1287
<i>Yuming Xiao ; Jiawei Zhang ; Yuefeng Ji</i>	
PERFORMANCE ANALYSIS OF FSO SYSTEMS OVER UNIFIED EXPONENTIATED WEIBULL CHANNELS	1290
<i>Zhengguang Gao ; Jiawei Zhang ; Yuefeng Ji</i>	
A TUNABLE TRUE TIME DELAY LINE BASED ON COUPLED ALL-PASS DOUBLE-RING RESONATOR	1293
<i>Xiaowen Gu ; Fengjie Zhou ; Bin Niu ; Guang Qian ; Yuechan Kong</i>	
HYBRID SILICON AND LITHIUM NIOBATE MICHELSON INTERFEROMETER MODULATOR	1296
<i>Mengyue Xu ; Mingbo He ; Xueqin Wen ; Ziliang Ruan ; Liu Liu ; Xinlun Cai</i>	
ADAPTIVE FLOW CONTROL SCHEME BASED ON FLOW CONTROL PROTOCOL IN FIBER CHANNEL	1299
<i>Xi Guo ; Liqian Wang ; Zhuofu Zhong ; Yueying Zhan ; Suzhi Cao ; Shaojun Wu</i>	
VISIBLE COHERENT FEMTOSECOND SUPERCONTINUUM FROM AIR-SUSPENDED-CORE PHOTONIC CRYSTAL FIBER	1302
<i>Jindan Shi ; Feng Han ; Xian Feng</i>	
L-BAND PASSIVELY MODE-LOCKED FIBER LASER BASED ON WS₂ SATURABLE ABSORBER	1305
<i>Wenxiong Du ; Heping Li ; Changyong Lan ; Shengnan Shen ; Junwen Li ; Yong Liu</i>	
JOINT OPTIMIZATION FOR COMBINED JOBS SCHEDULING AND ROUTING IN THE EDGE COMPUTING BASED EON	1308
<i>Yanan Li ; Jiawei Zhang ; Zhen Liu ; Yuefeng Ji</i>	
THEORY FOR MODE COUPLING IN NON-IDEAL RING FIBERS	1311
<i>Bin Zhang ; Xia Zhang ; Xiaoguang Zhang ; Zhenshan Yang ; Chenglin Bai ; Minghua Cao</i>	
INTEGRATION OF VERTICAL-CAVITY SURFACE-EMITTING LASER ON SILICON PHOTONIC CIRCUITS USING TILTED MEMBRANE BASED GRATING COUPLERS	1314
<i>Xueqin Wen ; Ziliang Ruan ; Yuntao Zhu ; Xinlun Cai ; Pengxin Chen ; Liu Liu</i>	
INTEGRATED PHOTONIC OAM EMITTER WITH WIDE TUNING RANGE	1317
<i>Sirui Yuan ; Peng Zhao ; Xue Feng ; Wei Zhang ; Yidong Huang</i>	
GRAPHENE BASED SILICON MICRODISK MODULATOR	1320
<i>Ming Jin ; Haowen Shu ; Yuansheng Tao ; Zhenan Wu ; Xingjun Wang</i>	
A BROADBAND MODE CONVERTER FROM LP₀₁ TO LP₁₁ MODES BASED ON A LONG-PERIOD FIBER GRATING USING A TWO-MODE FIBER	1323
<i>Shioji Motoyuki ; Hirokazu Kubota ; Masaharu Ohashi ; Yuji Miyoshi</i>	
NON SPHERICAL PARTICLE SIZE RETRIEVAL BY MULTI ANGLES MULTI WAVELENGTHS FORWARD LIGHT SCATTERING AND COLLIMATED TRANSMITTANCE	1326
<i>Md Arafat Islam ; Hong Qi ; Junyou Zhang ; Liming Ruan</i>	
OPTICAL-RESPONSE ANALYSIS OF VOLTAGE-MODULATED 1.3 μM WAVELENGTH ALGAINAS/INP TRANSISTOR LASER	1329
<i>Yusei Goto ; Shoichi Yoshitomi ; Kentaro Yamanaka ; Nobuhiko Nishiyama ; Shigehisa Arai</i>	
A TUNABLE MICROWAVE-PHOTONIC NOTCH FILTER BASED ON SINGLE SILICON RING RESONATOR	1332
<i>Zhou Fengjie ; Xiaowen Gu ; Yuechan Kong ; Bin Niu ; Guang Qian</i>	

EXPERIMENTAL DEMONSTRATION OF FLEXIBLE TDM-PON FRONTHAULING	1335
<i>U. Bucci ; A. Marotta ; K. Kondepu ; C. Antonelli ; L. Valcarengi ; D. Cassioli</i>	
EXPERIMENTAL DEMONSTRATION OF QPSK OPTICAL TRANSMISSION WITH OPTICAL PHASE CONJUGATION	1338
<i>Wenjing Zhou ; Xingwen Yi ; Jing Zhang ; Yang Jiang ; Wenjing Zhang ; Kun Qiu</i>	
INVESTIGATION OF THE WAVELENGTH SELECTION FOR THE FREE SPACE OPTICAL COMMUNICATION SYSTEM	1341
<i>Tao Liu ; Jingzhi Zhang ; Cong Zhu ; Yanxu Lei ; Chunyang Sun ; Rongxiang Zhang</i>	
FAST SOLITON COMPRESSION IN NONLINEAR FIBER VIA SHORTCUTS TO ADIABATICITY	1344
<i>Siwei Wang ; Jing Li ; Qian Kong ; Xi Chen</i>	
RATE-ADAPTIVE CODED MODULATION WITH GEOMETRICALLY-SHAPED CONSTELLATIONS	1347
<i>Bin Chen ; Yi Lei ; Domanic Lavery ; Chigo Okonkwo ; Alex Alvarado</i>	
IMPACT OF TEMPERATURE ON PROPAGATION TIME AND INTER-CORE SKEW IN A 19-CORE FIBER	1350
<i>B. J. Puttnam ; G. Rademacher ; R. S. Luis ; R. T. Jones ; Y. Awaji ; N. Wada</i>	
SILICON ANTI-SYMMETRIC MULTIMODE PERIODIC WAVEGUIDE CAVITIES	1353
<i>Jiaxin Qian ; Kai Li ; Qifeng Dong ; Weijie Wang ; Huiye Qiu ; Ping Yu</i>	
SILICON ADD-DROP FILTER FOR WDM OPTICAL INTERCONNECTS	1356
<i>Huiye Qiu ; Junnan Wan ; Ping Yu ; Ying Wang ; Jing Lv</i>	
ULTRA-HIGH QUANTUM EFFICIENCY MUSHROOM-TYPE RCE PHOTODETECTOR	1359
<i>Shuai Zhang ; Xiaofeng Duan ; Gongqing Li ; Yongqing Huang ; Xiaomin Ren ; Kai Liu</i>	
PERFORMANCE OF WIRELESS OPTICAL COMMUNICATION SYSTEMS BASED ON POLARIZATION SHIFT KEYING MODULATION OVER ANISOTROPIC NON-KOLMOGOROV TURBULENCE	1362
<i>Ziyang Li ; Jiankun Zhang ; Anhong Dang</i>	
A SCHEME FOR BROADBAND OPTICAL FREQUENCY COMB GENERATION	1365
<i>Fei Wang ; Lun Shi ; Mengmeng Peng ; Jingxin Huang ; Wen Kang</i>	
ENERGY OPTIMIZATION WITH PASSIVE WDM BASED FRONTHAUL IN HETEROGENEOUS CELLULAR NETWORKING	1368
<i>Dexue Song ; Jiawei Zhang ; Yuming Xiao ; Xin Wang ; Yuefeng Ji</i>	
ON-CHIP COARSE WAVELENGTH DIVISION MULTIPLEXERS BASED ON SILICON SUBWAVELENGTH GRATINGS	1371
<i>Jingye Chen ; Yaocheng Shi</i>	
DISCRIMINATIVE MEASUREMENT OF TEMPERATURE AND STRAIN USING STIMULATED BRILLOUIN SCATTERING AND GUIDED ACOUSTIC-WAVE BRILLOUIN SCATTERING	1373
<i>Yuanxiu Fu ; Xinyu Fan ; Bin Wang ; Zuyuan He</i>	
A NOVEL TIMING SYNCHRONIZATION ALGORITHM FOR CO-OFDM SYSTEMS	1376
<i>Yanpeng Xu ; Jianfei Liu ; Siyang Liu ; Xiangye Zeng ; Jia Lu</i>	
A HUFFMAN CODING COMPRESSION ALGORITHM FOR REDUCING OPTICAL TRANSMISSION BANDWIDTH OF MFH	1379
<i>Xiaoxue Nan ; Jianfei Liu ; Siyang Liu ; Xiangye Zeng ; Jia Lu</i>	
MITIGATION OF MODULATION DISTORTION IN WIDEBAND AND MULTI-CARRIER ANALOG PHOTONICS LINKS BASED ON ARTIFICIAL NEURAL NETWORK	1382
<i>Enji Liu ; Zhenming Yu ; Tian Zhang ; Kun Xu</i>	
USING PIECEWISE POLYNOMIAL FITTING AS THRESHOLD TO IMPROVE THE PERFORMANCE OF MOBILE PHONE CAMERA BASED VLC SYSTEM	1385
<i>Zhenshan Zhang ; Yaojun Qiao ; Tiantian Zhang ; Yueming Lu</i>	
CONTROLLED PHASE COMPENSATION IN HR-AR-COATED DFB LASER WITH SAMPLED BRAGG GRATING	1388
<i>Jie Zeng ; Rulei Xiao ; Yating Zhou ; Xiangfei Chen</i>	
NONLINEARITY-AWARE 260-GBIT/S DMT TRANSMISSION USING FREQUENCY-DOMAIN VOLTERRA EQUALIZATION FOR SHORT-REACH OPTICAL INTERCONNECTS	1391
<i>Yongsheng Xu ; Junwei Zhang ; Ziqi Lin ; Langyu Yi ; Baoxian Yu ; Sen Zhang ; Tianjian Zuo ; Lei Liu ; Jie Liu ; Changjian Guo</i>	
RESONANT RESPONSE AND FOUR-WAVE MIXING VIA MICROSPHERE COUPLED WITH MICROFIBER COUPLER	1394
<i>Ke Liu ; Yang He ; Ao Yang ; Xianglong Zeng ; Fufei Pang ; Tingyun Wang</i>	
INAs QDS ON (111)-FACETED SI (001) HOLLOW SUBSTRATES WITH STRONG EMISSION AT 1300 NM AND 1550 NM	1396
<i>Wen-Qi Wei ; Ting Wang ; Jian-Jun Zhang</i>	

HIGH EFFICIENCY AND POLARIZATION INSENSITIVE TWO-DIMENSIONAL GRATING COUPLER ON SILICON	1399
<i>Bin Chen ; Xian Zhang ; Xueqin Wen ; Ziliang Ruan ; Yuntao Zhu ; Liu Liu</i>	
AN INTRA-RACK OTS/EPS HYBRID NETWORK BASED ON FLOW IDENTIFICATION IN CLOUD DATA CENTER	1401
<i>Zhiwen Zhu ; Yu Shang ; Bingli Guo ; Shanguo Huang ; Weiguo Ju ; Yuan Yuan</i>	
A KALMAN SCHEME FOR POLARIZATION DEMULTIPLEXING IN PRESENCE OF RESIDUAL CHROMATIC DISPERSION	1404
<i>Wei Yi ; Zibo Zheng ; Xiaoguang Zhang ; Nan Cui ; Lixia Xi ; Wenbo Zhang</i>	
LP01-LP11A/B MODE CONVERTER BASED ON LONG-PERIOD GRATING IN ELLIPTICAL FEW-MODE FIBER	1407
<i>Zuyao Liu ; Xinyi Zhao ; Yunqi Liu ; Songnian Fu ; Chengbo Mou ; Fang Zou</i>	
EXPERIMENTAL CHARACTERIZATION OF AN SOA-BASED PHOTONIC INTEGRATED SWITCH.....	1410
<i>Maria Freire ; Eloise De Carvalho Rodrigues ; Atchutananda Surampudi ; Franck Gillet ; Cédric Ware ; Antoine Lavignotte ; Catherine Lepers</i>	
THE FUTURE OF HIGHER SPEED PONS	1413
<i>Frank J. Effenberger</i>	
WAVELENGTH ROUTING ASSIGNMENT OF OPTICAL NETWORKS ON TWO TYPICAL LEO SATELLITE CONSTELLATIONS.....	1417
<i>Sun Xue ; Cao Suzhi</i>	
FAST STATISTICAL ESTIMATION WITH VECTOR QUANTIZATION IN COMPRESSED DIGITAL ROF SYSTEM	1420
<i>Pu Yu ; Hongliang Ren ; Zichun Le ; Weisheng Hu</i>	
SUNLIGHT ENABLED VEHICLE DETECTION BY LED STREET LIGHTS.....	1423
<i>Weicheng Xue ; Shangbin Li ; Zhengyuan Xu</i>	
OPTICAL TRAPPING IN BOW-TIE SHAPED PHOTONIC CRYSTAL NANOBEAM CAVITIES	1426
<i>Yan Gao ; Yaocheng Shi</i>	
WAVELENGTH SELECTION TO PREDICT CRUDE PROTEIN IN SORGHUM USING PLSR	1429
<i>Nikita Chaturvedi ; Suresh Purini ; Syed Azeemuddin ; M. Kalyana ; K. Sarjan Rao</i>	
EXPERIMENTAL DEMONSTRATION OF TIME LENS BASED ON DIGITAL FREQUENCY SWEEPING.....	1432
<i>Wei Tang ; Xingwen Yi ; Jing Zhang ; Fan Li ; Xiatao Huang ; Kun Qiu</i>	
CO2 LASER INSCRIBED HELICAL LONG-PERIOD GRATING IN SIX-MODE FIBER.....	1435
<i>Xinyi Zhao ; Zuyao Liu ; Yunqi Liu ; Chengbo Mou ; Lei Shen ; Lei Zhang ; Jie Luo</i>	
ENERGY EFFICIENT TRAFFIC FLOWS MIGRATIONS IN NEXT GENERATION RADIO AND OPTICAL MIDHAUL NETWORK	1438
<i>Pengfei Zhu ; Jiawei Zhang ; Yuefeng Ji</i>	
RECOVERY OF DOUBLE PEAK-INDUCED ERROR IN BOTDA SENSORS.....	1441
<i>Xizi Sun ; Xiaobin Hong ; Sheng Wang ; Xia Gao ; Jian Wu</i>	
POLARIZATION-DEPENDENT HIGH QUALITY OPTICAL FREQUENCY COMB GENERATOR BASED ON RECIRCULATING FREQUENCY SHIFT.....	1444
<i>Tao Lin ; Shanghong Zhao ; Zihang Zhu ; Xuan Li ; Kun Zhang ; Wei Jiang</i>	
SIMULTANEOUS BENDING AND TEMPERATURE MEASUREMENTS BASED ON DOUBLE EXPOSED LONG PERIOD FIBER GRATINGS	1447
<i>Lu Huang ; Yunqi Liu ; Yunhe Zhao</i>	
DEMONSTRATION OF NETWORK SLICING IN MOBILE EDGE COMPUTING SERVICE MIGRATION.....	1450
<i>Zihao Wang ; Rentao Gu ; Geng Zhang ; Tianyi Zhao ; Yanan Wang ; Yang Wang ; Yuefeng Ji</i>	
CHARACTERISTICS OF HELICAL LONG-PERIOD GRATINGS WRITTEN IN DIFFERENT SMFS BY CO2-LASER	1453
<i>Chengcheng Xu ; Yunqi Liu ; Chen Jiang ; Tingyun Wang</i>	
F-P INTERFEROMETER FOR LOW LIQUID VELOCITY MEASUREMENT WITH NON-CONTACT AND HIGH SENSITIVITY	1455
<i>Qian Zhang ; Dewen Hou ; Lin Wang ; Yu Zhao ; Chunliu Zhao ; Juan Kang</i>	
GOLD NANOSHELL IMMOBILIZED EXCESSIVELY TILTED FIBER GRATING BIOSENSOR	1458
<i>Huafeng Lu ; Jiao Lu ; Binbin Luo ; Shenghui Shi ; Mingfu Zhao</i>	
GREATLY ENHANCED KERR NONLINEARITY IN HYPERBOLIC SLOT WAVEGUIDES	1461
<i>Guangyuan Li ; Yuanfu Lu ; Wenquan Liu ; Guohua Jiao ; Jiancheng Lv</i>	
RF-AMPLIFIER-FREE SUPERCONDUCTING NANOWIRE SINGLE-PHOTON DETECTOR SYSTEM.....	1463
<i>Xiaoming Chi ; Kai Zou ; Nan Hu ; Julien Zichi ; Val Zwiller ; Xiaolong Hu</i>	

HIGH EFFICIENT SINGLE PHOTON SOURCE BASED ON PHOTONIC MOLECULE WITH LOW TUNNELING STRENGTH CONTAINING A QUANTUM DOT	1466
<i>Ziang Zhu ; Zhongyuan Yu ; Han Ye ; Yumin Liu ; Wenbin Xu</i>	
SPONTANEOUS BRILLOUIN SCATTERING THRESHOLD ANALYSIS BASED ON N-FSK MODULATION	1470
<i>Jingjing Xu ; Xiaobin Hong ; Sheng Wang ; Xizi Sun ; Xia Gao ; Jian Wu</i>	
VALIDITY OF KRAMERS-KRONIG RELATION IN SIGNAL RETRIEVAL OF F-OTDR	1473
<i>Jialin Jiang ; Zinan Wang ; Yue Wu ; Yunjiang Rao</i>	
CONSTRUCTION OF IRREGULAR QC-LDPC CODES VIA ARBITRARY DEGREE DISTRIBUTION MASKING ALGORITHM	1476
<i>Fu Yang ; Liqian Wang ; Dongdong Wang ; Xue Chen ; Midou Cui</i>	
ARBITRARY POLARIZATION CONVERSION FROM 0 TO 90 BASED ON ALL-DIELECTRIC METASURFACES	1479
<i>Xiaodong Cai ; Zhiwei Li ; Yongjiu Li ; Kai Wang ; Dunke Lu ; Yunbing Wei</i>	
ALL-OPTICAL PHASE SHIFTER AND SWITCH BASED ON MICROFIBER COATED WITH COLLOIDAL QUANTUM DOTS	1482
<i>Li Shen ; Feng Gao ; Lin Gan ; Liang Huo ; Songnian Fu ; Huan Liu ; Ming Tang</i>	
DETERMINATION OF THE COMPLEX PERMITTIVITY OF ULTRATHIN H₂-INFUSED PALLADIUM COATINGS FOR PLASMONIC FIBER OPTIC SENSORS IN THE NEAR INFRARED	1484
<i>Xuejun Zhang ; Tuan Guo ; Jacques Albert</i>	
EXPERIMENTAL STUDY OF THE ATMOSPHERIC TURBULENCE INFLUENCE ON FSO COMMUNICATION SYSTEM	1487
<i>Ni Xiaolong ; Yao Haifeng ; Liu Zhi ; Chen Chunyi ; Meng Ce ; Zhao Jiaxu</i>	
CLOCK RECOVERY AND ADAPTIVE EQUALIZATION FOR 50GBIT/S PAM4 TRANSMISSION	1490
<i>Honghang Zhou ; Yan Li ; Chao Gao ; Wei Li ; Xiaobin Hong ; Jian Wu</i>	
A NOVEL FILTER BASED ON A SUBWAVELENGTH GRATING FOCUSING REFLECTOR AND A DBR	1493
<i>Shaojuan Mao ; Yongqing Huang ; Hongming Gu ; Baoying Liu ; Xiaofeng Duan ; Xiaomin Ren</i>	
DYNAMIC ROUTING, CORE, AND SPECTRUM ASSIGNMENT WITH MINIMIZED CROSSTALK IN SPATIAL DIVISION MULTIPLEXING ELASTIC OPTICAL NETWORKS	1496
<i>Yu Lei ; Bowen Chen ; Mingyi Gao ; Lian Xiang ; Qianwu Zhang</i>	
IMPACT OF INITIAL PULSE SHAPE ON SPECTRAL COMPRESSION IN NONLINEAR FIBERS WITH EXPONENTIALLY INCREASING DISPERSION	1499
<i>Jiaxi Cheng ; Xiaolong Yuan ; Qian Li</i>	
MAP DECODER FOR NONLINEAR COMPENSATION IN WDM DP-QPSK SYSTEMS	1501
<i>Shuai Yuan ; Koji Igarashi</i>	
SIMULTANEOUS MEASUREMENT OF REFRACTIVE INDEX AND TEMPERATURE BY M-Z INTERFEROMETER CASCADED WITH A FBG	1504
<i>Mingyang Xie ; Huaping Gong ; Jun Zhang ; Yongxing Jin</i>	
A MODIFIED TIMING SYNCHRONIZATION METHOD FOR OFDM SYSTEMS	1507
<i>Lei Zhang ; Tao Yang ; Huan Chen ; Haoyuan Pan ; Xue Chen</i>	
QUANTUM PHASE TRANSITION IN STRONGLY-CORRELATED CAVITY POLARITONS	1510
<i>Jian Xue ; Kangjun Seo ; Lin Tian ; Tao Xiang</i>	
SIGNIFICANT OSNR IMPROVEMENT IN INTENSITY MODULATION AND COHERENT DETECTION METRO LINKS ENABLED BY ADVANCED NONLINEAR DSP	1513
<i>Jinlong Wei ; Tianjian Zuo ; Fabio Pittala ; Gernot Goeger ; Le Nguyen Binh</i>	
FLEXIBLE SERVICE CHAIN MAPPING IN SERVER-CENTRIC OPTICAL DATACENTER NETWORKS	1516
<i>Qiman Chen ; Bing Yang ; Dan Zhang ; Qiong Zhang ; Jiajia Chen</i>	
TEMPERATURE SENSITIVITY ENHANCEMENT FOR SILICON-BASED MACH-ZEHNDER INTERFEROMETER WITH SINGLE-MASK DESIGN	1519
<i>Yang Zhang ; Jun Zou ; Jian-Jun He</i>	
3-KILOWATT ALL-FIBER DISTRIBUTED SIDE-PUMPED OSCILLATOR WITH HIGH SRS SUPPRESSION	1522
<i>Heng Chen ; Jianqiu Cao ; Zhihe Huang ; Yankun Ren ; Xiaolin Wang ; Jinbao Chen</i>	
NON-VOLATILE OPTICAL MEMORY BASED ON A SLOT NANOBEAM RESONATOR FILLED WITH GST MATERIAL	1524
<i>Hao Hu ; Hanyu Zhang ; Linjie Zhou ; Youhua Xu ; Liangjun Lu ; Jianping Chen ; B. M. A. Rahman</i>	

SCHEDULING TRAFFIC SWITCHING IN AN ALL-OPTICAL INTRA-DATACENTER NETWORK WITH SUB-WAVEBAND SWITCHING	1527
<i>Zhaoxin Zhong ; Chao Guo ; Gangxiang Shen</i>	
INVESTIGATION OF RADIATION EFFECT ON SINGLE-MODE FIBER FOR DISTRIBUTED RADIATION SENSING APPLICATION	1530
<i>Jiangchuan Wu ; Lin Ma ; Feng Tu ; Zuyuan He</i>	
PHYSICAL LAYER ABSTRACTION UTILIZING OSNR MONITORING BASED ON DEEP NEURAL NETWORK	1533
<i>Le Xia ; Jing Zhang ; Yingxiong Song ; Qianwu Zhang ; Xiang Li ; Kun Qiu</i>	
OPTICAL ROTATION DETECTION FOR ATOMIC SPIN PRECESSION USING A SUPERLUMINESCENT DIODE	1536
<i>Xuejing Liu ; Yang Li ; Hongwei Cai ; Ming Ding ; Jiancheng Fang ; Wei Jin</i>	
SWITCHABLE DUAL-MODE ALL-FIBER LASER BY USING LPG AND FBG	1543
<i>Tingting Yan ; Youchao Jiang ; Haisu Li ; Wenhua Ren</i>	
EDGE-BUFFERED CONTENTION-RESOLUTION HYBRID OPTICAL/ELECTRICAL SWITCH FOR DATA CENTER NETWORKS	1545
<i>Bao Huang ; Tong Ye ; Linggang Wang ; Weisheng Hu</i>	
SENSITIVE LIQUID SENSING USING ROLLED-UP INAS/GAAS QUANTUM DOT MICROTUBE RING RESONATOR	1548
<i>Jiawei Cao ; Qi Wang ; Zhaoer Chai ; Yunxuan Zhu ; Hao Liu ; Kai Liu ; Xiaomin Ren</i>	
HIGH-CONFINEMENT, HIGH-Q MICRORING RESONATORS ON SILICON CARBIDE-ON-INSULATOR (SICOI)	1551
<i>Yi Zheng ; Ailun Yi ; Minhao Pu ; Bingdong Chang ; Tianguai You ; Kai Huang ; Xin Ou ; Haiyan Ou</i>	
RESEARCH ON REFRACTIVE INDEX SENSOR BASED ON MULTI- CORE MICRO-NANO FIBER	1554
<i>Yue-Feng Qi ; Jin Zhang ; Yan-Tao Wang ; Qi Feng ; Xin Zhang ; Ming-Jun Wang ; Yan-Yan Liu</i>	
DISTRIBUTED SUB-TREE BASED MULTICASTING AGGREGATION SCHEME IN ELASTIC OPTICAL DATA CENTER NETWORKS	1557
<i>Ying Tang ; Xin Li ; Tao Gao ; Lu Zhang ; Junfeng Guo ; Yongjun Zhang ; Shanguo Huang</i>	
EXPERIMENTAL RESEARCH ON TUNABLE NARROW LINEWIDTH DFB LASER ARRAYS UTILIZING EQUIVALENT APODIZATION SAMPLED GRATINGS	1560
<i>Yunshan Zhang ; Lianyan Li ; Zuye Lu ; Jie Zeng ; Jilin Zheng ; Xiangfei Chen</i>	
HIGH ORDER RANDOM RAMAN FIBER LASER OPERATING AT 1355 NM	1563
<i>Tianfu Yao ; Haolei Zhang ; Liangjin Huang ; Jian Wu ; Pu Zhou</i>	
WIDE-SPECTRUM PULSED FIBER LASER BASED ON PICOSECOND PULSE GENERATION SUPERCONTINUUM	1566
<i>Lin Peng ; Wang Tianshu ; Chen Junda ; Zhang Xinmeng ; Sun Zhiwen ; Jiang Ziqi</i>	
CONNECTIVITY ENHANCEMENT OF EDGE COMPUTING OVER FIBER-WIRELESS ACCESS NETWORKS FOR IOT	1570
<i>Jing Liu ; Guochu Shou ; Junli Xue</i>	
GENERATION AND EVOLUTION OF HARMONIC MODE- LOCKED SQUARE PULSE IN AN YB-DOPED FIBER LASER	1573
<i>Xingliang Li ; Ce Shang ; Zhenjun Yang ; Shumin Zhang ; Huiyun Han ; Lisha Liu</i>	
SEEING THE MODES IN FEW-MODE FIBERS THROUGH DEEP LEARNING	1576
<i>Yi An ; Liangjin Huang ; Jun Li ; Jinyong Leng ; Lijia Yang ; Pu Zhou</i>	
EXPERIMENTAL DEMONSTRATION OF 7-MODE WEAKLY- COUPLED MDM TRANSMISSION OVER 200-M MMF	1579
<i>Chunyan Du ; Juhao Li ; Zhongying Wu ; Mingqing Zuo ; Ping Meng ; Haotian Cao ; Yongqi He ; Zhangyuan Chen</i>	
COLOR TEMPERATURE ADJUSTABLE LED BASED ON STRUCTURED FLUORESCENT FILM	1582
<i>Wang Shiyu ; Shi Yan ; Zhuang Yi</i>	
A PAIR OF INTEGRATED OPTOELECTRONIC CHIPS FOR OPTICAL INTERCONNECTS	1585
<i>Qi Wei ; Kai Liu ; Yongqing Huang ; Xiaofeng Duan ; Qi Wang ; Xiaomin Ren ; Shiwei Cai</i>	
OPTICAL FREQUENCY TRANSFER OVER 400-KM COMMERCIAL FIBER NETWORK WITH A FRACTIONAL FREQUENCY INSTABILITY OF 10⁻¹⁹ LEVEL	1587
<i>Jie Liu ; Xue Deng ; Qi Zang ; Xiang Zhang ; Dan Wang ; Dongdong Jiao ; Weicheng Kong ; Tao Liu ; Xue Deng ; Dongdong Jiao ; Weicheng Kong</i>	
INTEGRATING PERIODICALLY CL-TWE MZI ELECTRO-OPTIC MODULATOR BASED ON INP-MQW OPTICAL WAVEGUIDES	1590
<i>Guang Qian ; Bin Niu ; Wu Zhao ; Xiao-Wen Gu ; Feng-Jie Zhou ; Guan-Yu Li ; Yue-Chan Kong ; Tang-Sheng Chen</i>	

SPECTRAL CHARACTERISTICS OF FILM FOR DISSOLVED OXYGEN-SENSING	1593
<i>Mengxue Guo ; Weihong Bi ; Wa Jin ; Sheng Zhang ; Zhe Li</i>	
SERVICE-CLASSIFIED ROUTING, CORE, AND SPECTRUM ASSIGNMENT IN SPATIAL DIVISION MULTIPLEXING ELASTIC OPTICAL NETWORKS WITH MULTICORE FIBER	1596
<i>Qingcheng Zhu ; Lulu Lv ; Lei Zhu ; Ting Wang ; Lihang Gao ; Yu Lei ; Bowen Chen ; Qianwu Zhang</i>	
SELF-STARTING DUAL MODE-LOCKING ER-DOPED FIBER LASER WITH LOW REPETITION RATE*	1599
<i>Dongfang Jia ; Yiting Jin ; Xu Sun ; Zihao Li ; Chunfeng Ge ; Zhaoying Wang</i>	
ULTRA-STABLE PASSIVELY Q-SWITCHED YB-DOPED ALL-FIBER LASER WITH A BLACK PHOSPHORUS SATURABLE ABSORBER	1602
<i>Tao Wang ; Xiaoxi Jin ; Hanshuo Wu ; Jiabin Song ; Jian Wu ; Pu Zhou</i>	
A BROADBAND PULSED OPTICAL SWITCH FROM NEAR-INFRARED TO MID-INFRARED EMPLOYING MULTILAYER ANTIMONENE	1605
<i>Xiangling Tian ; Rongfei Wei ; Jianrong Qiu</i>	
SCHEMES OF HIGH-ORDER PULSE MODULATIONS FOR GAMMA-GAMMA CHANNEL FREE-SPACE OPTICAL COMMUNICATION	1608
<i>Meiyong Xu ; Kaimin Wang ; Sijie Huang ; You Yong ; Xiongfei Fan ; Xiangjun Xin</i>	
AN INGAN MICRO-LED BASED PHOTODETECTOR ARRAY FOR HIGH-SPEED PARALLEL VISIBLE LIGHT COMMUNICATION	1611
<i>Xiaoyan Liu ; Runze Lin ; Zeyuan Qian ; Honglan Chen ; Xiaojie Zhou ; Gufan Zhou ; Xugao Cui ; Xiaolin Zhou ; Lirong Zheng ; Ran Liu ; Pengfei Tian</i>	
REMOTE LIBS MEASUREMENTS ON METALS USING A MOBILE LIDAR SYSTEM	1614
<i>Zheng Duan ; Ying Li ; Jinlei Wang ; Lingna Hu ; Guangyu Zhao ; Sune Svanberg</i>	
INFLUENCE OF GAMMA-RAY IRRADIATION ON THE FLUORESCENCE LIFETIME OF BI/ER CO-DOPED FIBERS	1617
<i>Lijun Chen ; Jianxiang Wen ; Qian Wang ; Fufei Pang ; Zhenyi Chen ; Yanhua Luo ; Gang-Ding Peng ; Tingyun Wang</i>	
HIGH QUALITY PULSE TRAIN FROM DISCRETE FOURIER DOMAIN MODE LOCKED LASER WITH A COMB FILTER	1620
<i>Zhenhao Cen ; Feng Li ; Qian Li ; P. K. A. Wai</i>	
SECURE BIDIRECTIONAL ADAPTIVE RESOURCE ALLOCATION IN SDN-ENABLED 5G FRONTHAUL NETWORKS	1623
<i>Mingwei Yang ; Houman Rastegarfar ; Ivan B. Djordjevic</i>	
IMPROVING THE NONLINEAR LIMITATION OF ROF LINK BY USING LP01 AND LP11 SIMULTANEOUSLY	1626
<i>Pengyue Deng ; Guanjun Gao ; Ruihuan Wu ; Cheng Xu ; Yifan Shen ; Jie Zhang</i>	
1.34 μM INGAASP/INP MQW SUPERLUMINESCENT DIODES WITH J-SHAPED RIDGE WAVEGUIDE	1629
<i>Long Wang ; Qi Wang ; Hao Liu ; Guang Yang ; Kai Liu ; Xiaomin Ren</i>	
A NOVEL 68GB/S QPSK COHERENT OPTICAL COMMUNICATION SCHEME DEMONSTRATION FOR THE INTEGRATION OF SATELLITE COMMUNICATION AND RANGING	1632
<i>Jie Yin ; Tao Dong ; Yuwei Su ; Yue Zhou ; Kun Xu</i>	
UNDERWATER WIRELESS OPTICAL COMMUNICATION WITH HIGH MODULATION LEVEL BASED STREAM CIPHER	1635
<i>Yawen Shang ; Wenyan Mao ; Mengxiang Han ; Cheng Xu ; Guanjun Gao</i>	
HIGH-SENSITIVITY OPTICAL HUMIDITY SENSING BASED ON POLYMER MICROFIBER CAVITY-COUPLED METALLIC NANOROD	1638
<i>Ning Zhou ; Pan Wang ; Zhangxing Shi ; Xin Guo ; Jianrong Qiu ; Limin Tong</i>	
MINIATURIZED MID-INFRARED ALL-FIBER LASER PASSIVELY Q-SWITCHED BY TOPOLOGICAL INSULATOR BI2SE3	1641
<i>Weiwei Li ; Kaijie Wang ; Tuanjie Du ; Jinhai Zou ; Yanhong Li ; Zhengqian Luo</i>	
ANALYSIS OF BEAM WANDER AND POINTING ERROR ON LASER BEAM PROPAGATION THROUGH ATMOSPHERE	1644
<i>Suman Basak ; Syed Azeemuddin ; Jagannath Nayak</i>	
OPTICAL POWER DEPENDENCE OF CAPACITANCE IN UNI- TRAVELING-CARRIER PHOTODETECTORS	1647
<i>Xiaokai Ma ; Yongqing Huang ; Yanwei Yang ; Tao Liu ; Xiaofeng Duan ; Xiaomin Ren</i>	
100KM DYNAMIC STRAIN SENSING VIA CP-FOTDR	1650
<i>Ji Xiong ; Zinan Wang ; Yue Wu ; Yongxiang Chen ; Yunjiang Rao</i>	

NONLINEAR GAIN AND OPTICAL BISTABILITY IN NOVEL GAINNAS VERTICAL-CAVITY SEMICONDUCTOR OPTICAL AMPLIFIERS	1653
<i>Yun Sun ; Michael J. Adams ; Meng Xun ; Dexin Wu ; Jin Zhi ; Xinyu Liu</i>	
CAPACITY OF MULTI-CORE FIBER WITH MAXIMUM-RATIO COMBINING OPTICAL RECEIVER	1656
<i>Amira M. Hussein ; Ziad A. El-Sahn ; Hossam M. H. Shalaby</i>	
CONSTRUCTING SATELLITE BACKBONE NETWORK VIA TIMESLOT-BASED OPTICAL SWITCHING	1659
<i>Qing Zhang ; Hongxiang Guo ; Cen Wang ; Jian Wu</i>	
THROUGHPUT OPTIMIZATION IN HYBRID RF/FSO NETWORKS	1662
<i>Weijing Qi ; Qingyang Song ; Lei Guo</i>	
MULTI-STACK CHIRPED INAS/INP QUANTUM-DASH STRUCTURE AS A TUNABLE LASER.....	1665
<i>E. Alkhazraji ; Mohd Sharizal Alias ; M. Z. M. Khan</i>	
INTEGRATING QUANTUM KEY DISTRIBUTION WITH THE SPATIAL DIVISION MULTIPLEXING ENABLED HIGH CAPACITY OPTICAL NETWORKS.....	1668
<i>Rui Lin ; Aleksajs Udalcovs ; Oskars Ozolins ; Xiaodan Pang ; Lin Gan ; Li Shen ; Ming Tang ; Songnian Fu ; Chen Yang ; Weijun Tong ; Deming Liu ; Thiago Ferreira Da Silva ; Guilherme. B. Xavier ; Jiajia Chen</i>	
EXPLOITING CORE-SWITCHING TO MINIMIZE FRONTHAUL DEGRADATION USING MULTICORE FIBER	1671
<i>Swapna Doddikrinda ; Andrea Marotta ; Dajana Cassioli ; Cristian Antonelli ; Koteswararao Kondepu ; Luca Valcarenghi</i>	
CONVERGENCE OF 5G RAN AND OPTICAL ACCESS: A COORDINATED RESOURCE ALLOCATION FRAMEWORK	1674
<i>Yejun Liu ; Chathurika Ranaweera ; Christina Lim ; Lei Guo ; Ampalavanapillai Nirmalathas ; Elaine Wong</i>	
STANDARD-COMPLIANT DYNAMIC BANDWIDTH ALLOCATION IN OFDM-PON SUPPORTING MULTI-SERVICE.....	1677
<i>Yuying Liu ; Yejun Liu ; Na Yan ; Pengchao Han ; Lei Guo</i>	
POWER ALLOCATION FOR MAXIMUM EFFECTIVE TRANSMISSION IN COOPERATIVE FSO NETWORKS.....	1680
<i>Song Song ; Yejun Liu ; Lei Guo ; Yuting Meng ; Ning Lu</i>	
METRO TRANSPORT ARCHITECTURES FOR RELIABLE AND UBIQUITOUS SERVICE PROVISIONING	1683
<i>João Pedro ; António Eira ; Nelson Costa</i>	
BROADBAND LIGHT SOURCES BASED ON HIGHLY-NONLINEAR ALGAS-ON-INSULATOR WAVEGUIDE DEVICES.....	1686
<i>Minhao Pu ; Hao Hu ; Pengyu Guan ; Elizaveta Semenova ; Leif Katsuo Oxenløwe ; Kresten Yvind</i>	
EVALUATION ON ENERGY EFFICIENCY OF FLEXIBLE MF-OTP-BASED EONS IN SERVING ASYMMETRIC TRAFFIC	1688
<i>Geunsoo Kim ; Jaehoon Kim ; Limei Peng</i>	
PHYSICAL LAYER CONTROL FOR DISAGGREGATED OPTICAL SYSTEMS.....	1691
<i>Daniel C. Kilper ; Shengxiang Zhu ; Jiakai Yu</i>	
HIGHLY-EFFICIENT 1.5 μM OPTICAL PARAMETRIC OSCILLATOR BASED ON MGO:PPLN.....	1694
<i>Wang Shutong ; Palidan Aierken ; Niu Sujian ; Taximaiti Yusufu</i>	
HYPERBOLIC-SINE BREATHERS IN NONLOCAL MATERIALS	1697
<i>Zhenjun Yang ; Limin Song ; Xingliang Li ; Shumin Zhang</i>	
STUDY ON MEASUREMENT METHOD OF HOLLOW FIBER RAMAN SPECTRUM DETECTION ON LIQUID SAMPLE	1699
<i>Yuan Liu ; Jinyu Wang ; Jiqiang Wang ; Zhen Li ; Yanong Ning ; Tongyu Liu</i>	
ADVANCES IN POWER-EFFICIENT SDM TRANSMISSION TECHNOLOGIES	1702
<i>Emmanuel Le Taillandier De Gabory ; Keiichi Matsumoto ; Hitoshi Takeshita</i>	
HIGHLY SENSITIVE IN-FIBER TEMPERATURE SENSOR BASED ON TECHNOLOGY OF TAPERED-DRAWING AND ARC DISCHARGE.....	1705
<i>Jian Geng ; Xiaojun Zhu ; Guoan Zhang</i>	
SUBWAVELENGTH GRATING MICRODISK FOR MID-INFRARED OPTICAL SENSING.....	1708
<i>Long Zhang ; Daoxin Dai</i>	
SILICON-BASED ADD-DROP OPTICAL FILTER AT 2 μM.....	1710
<i>Dajian Liu ; Hao Wu ; Daoxin Dai</i>	
VERTICAL-CAVITY SURFACE-EMITTING LASERS FOR COMMUNICATION, SENSING, AND INTEGRATION.....	1712
<i>James A. Lott</i>	
ENABLING TECHNOLOGIES IN PACKET OPTICS	1713
<i>Yang Yue ; Qiang Wang ; Jeffery J. Maki ; Jon Anderson</i>	

FEMTOSECOND-LASER-INScribed FIBER BRAGG GRATINGS FOR HIGH-TEMPERATURE SENSING	1716
<i>Jun He ; Xizhen Xu ; Changrui Liao ; Chao Wang ; Yiping Wang</i>	
CHAOTIC GENERATOR IN WAVELENGTH USING TUNABLE LASER WITH FIBER BRAGG GRATING	1719
<i>Guohui Lyu ; Bohan Luan ; Huiying Wang ; Yan Zhang ; Chaozheng Wang ; Xu Jiang</i>	
SIMULATION DESIGN OF FIBER BRAGG GRATING RESONANT SENSOR FOR TRAIN BEARING DAMAGE DETECTION	1722
<i>Guohui Lyu ; Yali Jiang ; Chaozheng Wang ; Jushang Zhao ; Guohang Che ; Xu Jiang</i>	
DYNAMIC CONTROLLER DEPLOYMENT FOR MIXED-GRID OPTICAL NETWORKS	1725
<i>Sabidur Rahman ; Tanjila Ahmed ; Sifat Ferdousi ; Partha Bhaumik ; Pulak Chowdhury ; Massimo Tornatore ; Goutam Das ; Biswanath Mukherjee</i>	
ARTIFICIAL INTELLIGENT PATTERN RECOGNITION FOR OPTICAL FIBER DISTRIBUTED ACOUSTIC SENSING SYSTEMS BASED ON PHASE-OTDR	1727
<i>Hongqiao Wen ; Zhaoqiang Peng ; Jianan Jian ; Mohan Wang ; Hu Liu ; Zhi-Hong Mao ; Paul Ohodnicki ; Kevin P. Chen</i>	
APPLICATIONS OF LOW NOISE BRILLOUIN AMPLIFIERS FOR 64QAM COHERENT COMMUNICATIONS	1731
<i>Mark Pelusi ; Takashi Inoue ; Shu Namiki</i>	
LARGE-SCALE SILICON PHOTONIC SWITCHES	1734
<i>Ming C. Wu ; Tae Joon Seok</i>	
WIDEBAND SLOW LIGHT IN GRATING WAVEGUIDES	1737
<i>Gaoyang Ye ; Ran Hao ; Erping Li ; Jianyao Jiao ; Zhen Zhen ; Xiaobin Lin</i>	
FIELD TRIAL OF PROBABILISTIC-SHAPING-PROGRAMMABLE REAL-TIME 200-GB/S COHERENT TRANSCIEVERS IN AN INTELLIGENT CORE OPTICAL NETWORK	1740
<i>Junjie Li ; Anxu Zhang ; Chengliang Zhang ; Xiaoli Huo ; Qifang Yang ; Jianfeng Wang ; Jianwu Wang ; Wenjun Qu ; Yin Wang ; Jian Zhang ; Minggang Si ; Zhuhong Zhang ; Xiang Liu</i>	
14.4TB/S (30×480GB/S) FASTER-THAN-NYQUIST WDM TRANSMISSION WITH 60GBAUD PDM 16-QAM SIGNALS AT 55GHZ CHANNEL SPACING	1743
<i>Yixiao Zhu ; Lei Zhang ; Pengfei Wang ; Chenjia Li ; Fan Zhang</i>	
FIRST DEMONSTRATION OF IMBALANCED DATA LEARNING-BASED FAILURE PREDICTION IN SELF-OPTIMIZING OPTICAL NETWORKS WITH LARGE SCALE FIELD TOPOLOGY	1746
<i>Boyuan Yan ; Yongli Zhao ; Yajie Li ; Xiaosong Yu ; Jie Zhang ; Haomian Zheng Yilin</i>	
100.5TB/S MLC-CS-256QAM TRANSMISSION OVER 600-KM SINGLE MODE FIBER WITH C+L BAND EDFA	1750
<i>Yi Yu ; Lili Jin ; Zhiyu Xiao ; Fan Yu ; Yanzhao Lu ; Ling Liu ; Wanyang Wu ; Liangchuan Li</i>	
260-GB/S PAM-6 TRANSMISSION USING JOINT OPTICAL PRE-EQUALIZATION AND A LOW-COMPLEXITY VOLTERRA EQUALIZER FOR SHORT-REACH OPTICAL INTERCONNECTS	1753
<i>Yongsheng Xu ; Junwei Zhang ; Baoxian Yu ; Sen Zhang ; Tianjian Zuo ; Lei Liu ; Jie Liu ; Changjian Guo ; Alan Pak Tao Lau ; Chao Lu</i>	
SPATIOTEMPORAL DYNAMICS IN SPATIOTEMPORAL MODE-LOCKED MULTIMODE FIBER LASERS	1756
<i>Xiaosheng Xiao ; Yihang Ding ; Changxi Yang</i>	
DENSE III-V/SI PHASE SHIFTERS FOR OPTICAL PHASED ARRAYS	1759
<i>Weiqliang Xie ; Tin Komljenovic ; Jinxi Huang ; John Bowers</i>	
PHOTON-VELOCITY INVARIANCE, SYMITON-VELOCITY INVARIANCE AND THE EXTENSION OF SPECIAL RELATIVITY	1762
<i>Xiaomin Ren</i>	
CHAOTIC BEHAVIOR OF PULSATING SOLITON IN A FIBER LASER	1766
<i>Zhi-Wei Wei ; Meng Liu ; Shu-Xian Ming ; Ai-Ping Luo ; Wen-Cheng Xu ; Zhi-Chao Luo</i>	
COHERENT DETECTION OF TERAHERTZ WAVES WITH A GAS PLASMA	1768
<i>Xinyang Gu ; Kejia Wang ; Jinsong Liu</i>	
COMPACT, BROADBAND, AND POLARIZATION-INSENSITIVE 3 DB POWER SPLITTER ON SILICON	1771
<i>Xiaohui Jiang ; Daoxin Dai</i>	
ALL-FIBER ORBITAL ANGULAR MOMENTUM (OAM) BROADBAND FUNCTIONAL DEVICES FOR OAM GENERATION AND BEAM SPLITTING IN CONVENTIONAL GRADED-INDEX MULTIMODE FIBER	1773
<i>Wei Zhou ; Han Cao ; Jian Wang</i>	

A MICROWAVE PHOTONICS PHASE SYNCHRONIZATION NETWORK FOR DISTRIBUTED COHERENT APERTURE RADAR	1776
<i>Zhennan Zheng ; Xinlu Gao ; Bingli Guo ; Xin Li ; Shan Yin ; Shanguo Huang</i>	
Author Index	