

目次

• 物理光学 •

Floquet 拓扑光子绝缘体研究进展(特邀)(封面论文)	吴雄伟, 张嘉男, 陈龙, 姜卓辰, 马骞, 刘硕, 游检卫	0826001
非互易拓扑光子学研究进展(特邀)	周裕鸿, 郑悠, 徐力, 喻平, 高振, 王卓远	0826002

• 光纤光学与光通信 •

磁光型光纤电流传感器中的磁畴效应及非线性响应研究	梁志状, 韩群, 唐语良, 张腾, 程振洲	0806001
一种改进的三波长 EFPI 小信号解调方法	杨芮牧, 董小鹏	0806002
基于密度矩阵理论的偏振损伤联合补偿方案	郭瑶, 张霞, 杜秋萍, 杨震山, 张晓光	0806003

• 激光与激光光学 •

反常色散增益光纤构建无源自相似脉冲光纤激光器	龚睿, 耿亚林, 裴丽, 魏淮	0814001
基于 STM32 的半导体激光器输出功率和工作温度稳定性研究	夏志昌, 于永爱, 尚建华	0814002
基于 ISSA-BP 神经网络的激光甲烷传感器温度补偿研究	邹翔, 殷松峰, 程跃, 刘云龙	0814003

• 光学器件 •

高速光探测器的集成微透镜结构设计与制备	杨晓伟, 袁纬方, 李同辉, 李玉, 董晓雯, 刘凯, 黄永清, 段晓峰	0823001
宽度与曲率双渐变型低损耗硅基弯曲光波导设计	周悦, 孙耀辉, 吴浩宇, 陆梦佳, 胡国华, 恽斌峰, 崔一平	0823002
用于光放大的掺铒 Ga_2O_3 波导研究	刘瑞雪, 张政, 郭健, 杨振, 王威, 魏腾秀, 王荣平	0823003
基于卷积神经网络的双层液晶显示方法	冯奇斌, 张新, 郑琛, 王梓, 吕国强	0823004

• 仪器, 测量, 度量学 •

入射光在 AlGaAs 窗口层界面散射对透射式 GaAs 光电阴极分辨力的影响	郭欣, 石峰, 贾甜甜, 张若愚, 程宏昌, 张益军	0812001
基于光载微波干涉的距离测量方法	徐培源, 郑博伦, 潘震, 周次明	0812002
外差探测随机相位调制连续波激光测距的快速解调方法	吴映, 邓力华, 马超峰, 梁伟	0812003
宽动态范围微光照度源的设计与性能测试	李越, 袁银麟, 叶英杰, 孔德垚, 肖岚, 翟文超, 郑小兵	0812004

• 医用光学与生物技术 •

基于自注意力机制优化的 AtG-DeepLab V3+ 内窥图像增强算法	陈家俊, 李开祥, 李仁剑, 邵春蕾, 李贵叶, 陈玲玲	0817001
基于多尺度伪影生成对抗网络的磁共振成像脑肿瘤分割方法	张睦卿, 韩雨童, 陈柏年, 张建新	0817002

• 材料 •

聚乙烯吡咯烷酮链段长度依赖的钙钛矿结晶动力学和电致发光研究	陈文轩,何敏,陈平,陈琪	0816001
ZrSSe、HfSSe 及其二维异质结界面特征和介电特性研究	杜恭贺,胡旭东,杨倩文,徐永刚,任兆玉,赵奇一	0816002

• 全息术 •

基于全介质超表面的太赫兹波段偏振复用计算全息成像	张育铭,范文慧,吴奇,秦冲	0809001
--------------------------------	---------------	---------

• 光学设计与制造 •

基于单光机的双光路车载平视显示光学系统设计	任进伟,陈晓伟,王波,曹妍,孙奕晗,李新宇,吴慎将	0822001
-----------------------------	---------------------------	---------

(本期责编:魏坤)

Contents

• Physical Optics •

Research Progress of Floquet Topological Photonic Insulators (Invited) (Cover Paper)

.....WU Xiongwei, ZHANG Jianan, CHEN Long, LOU Zhuochen, MA Qian, LIU Shuo, YOU Jianwei 0826001

Progress of Nonreciprocal Topological Photonics (Invited)

.....ZHOU Yuhong, ZHENG You, XU Li, YU Ping, GAO Zhen, WANG Zhuoyuan 0826002

• Fiber Optics and Optical Communications •

Magnetic Domain Effects and Nonlinear Responses of Magneto-optic Fiber Current Sensors

.....LIANG Zhizhuang, HAN Qun, TANG Yuliang, ZHANG Teng, CHENG Zhenzhou 0806001

A Modified Three-wavelength Demodulation Method for Small Signals of EFPI

.....YANG Ruimu, DONG Xiaopeng 0806002

Joint Compensation Scheme for Polarization Impairment Based on Density Matrix Formalism

.....GUO Yao, ZHANG Xia, DU Qiuping, YANG Zhenshan, ZHANG Xiaoguang 0806003

• Lasers and Laser Optics •

Passive Self-similar Pulse Fiber Laser Constructed by Anomalous Dispersion Gain Fiber

.....GONG Rui, GENG Yalin, PEI Li, WEI Huai 0814001

Output Power and Temperature Stability of Semiconductor Laser Based on STM32

.....XIA Zhichang, YU Yongai, SHANG Jianhua 0814002

Temperature Compensation Study of Laser Methane Sensor Based on ISSA-BP Neural Network

.....ZOU Xiang, YIN Songfeng, CHENG Yue, LIU Yunlong 0814003

• Optical Devices •

Design and Fabrication of Integrated Microlens for High Speed Photodetectors

YUAN Weifang, LI Tonghui, LI Yu, DONG Xiaowen, LIU Kai, HUANG Yongqing, DUAN Xiaofeng 0823001

Design of Low Loss Silicon Waveguide Bend with Width and Curvature Variations

.....ZHOU Yue, SUN Yaohui, WU Haoyu, LU Mengjia, HU Guohua, YUN Binfeng, CUI Yiping 0823002

Erbium-doped Ga_2O_3 Waveguide for Optical Amplification

.....LIU Ruixue, ZHANG Zheng, WU Jian, YANG Zhen, WANG Wei, WEI Tengxiu, WANG Rongping 0823003

CNN-based Method for Dual-layer Liquid Crystal Displays

.....FENG Qibin, ZHANG Xin, ZHENG Chen, WANG Zi, LV Guoqiang 0823004

• Instrumentation, Measurement and Metrology •

Effect of Incident Light Scattering at AlGaAs Window Layer Interface on Resolution of Transmission-mode GaAs

PhotocathodeGUO Xin, SHI Feng, JIA Tiantian, ZHANG Ruoyu, CHENG Hongchang, ZHANG Yijun 0812001

Distance Measurement Method Based on Optical Carrier-based Microwave Interferometry

.....XU Peiyuan, ZHENG Bolun, PAN Zhen, ZHOU Ciming 0812002

Computation Efficient Demodulation Method for Random Phase Modulated Continuous Wave Light Ranging Based on Heterodyne Detection	WU Ying,DENG Lihua,MA Chaofeng,LIANG Wei	0812003
Design and Performance Test of Low Light Level Illumination Source with Wide Dynamic Range	LI Yue,YUAN Yinlin,YE Yingjie,KONG Deyao,XIAO Lan,ZHAI Wenchao,ZHENG Xiaobing	0812004
• Medical Optics and Biotechnology •		
AtG-DeepLab V3+ Endoscopic Image Enhancement Algorithm Based on Self-attention Mechanism Optimization	CHEN Jiajun,LI Kaixiang,LI Renjian,SHAO Chunlei,LI Guiye,CHEN Lingling	0817001
Magnetic Resonance Imaging Brain Tumor Segmentation Using Multiscale Ghost Generative Adversarial Network	ZHANG Muqing,HAN Yutong,CHEN Bonian,ZHANG Jianxin	0817002
• Materials •		
Polyvinyl Pyrrolidone Segment Length Dependent Perovskite Crystallization Kinetics and Electroluminescence Performance	CHEN Wenxuan,HE Min,CHEN Ping,CHEN Qi	0816001
Dielectric Properties and Interface Characteristics of ZrSSe, HfSSe and Their 2D Heterojunctions	DU Gonghe,HU Xudong,YANG Qianwen,XU Yonggang,REN Zhaoyu,ZHAO Qiyi	0816002
• Holography •		
Terahertz Polarization Multiplexing Computer-generated Holography Based on All-dielectric Metasurface	ZHANG Yuming,FAN Wenhui,WU Qi,QIN Chong	0809001
• Optical Design and Fabrication •		
Design and Optimization of Dual-focal Vehicle Head-up Display Optical System Based on Single-optical Machine	REN Jinwei,CHEN Xiaowei,WANG Bo,CAO Yan,SUN Yihan,LI Xinyu,WU Shenjiang	0822001