

目次

• 光学设计与制造 •	
用于皮秒激光切割的贝塞尔镜头研究	魏张帆,孙川,郭凯,等 1022001
结构紧凑型大相对孔径离轴两反自由曲面望远光学系统设计	周欣茹,宋华堂,朱润徽,等 1022002
• 激光与激光光学 •	
蓝光离轴泵浦 Pr:YLF 激光器及其高阶横模特性实验研究	张锋宸,惠沉林,舒启鹤,等 1014001
表面改性硅的超快激光脉冲制备及光电特性研究(英文)	杨洋,李超,赵纪红 1014002
• 光纤光学与光通信 •	
正向压力下 FBG 柔性传感器界面滑移的应变误差分析	葛子阳,王彦,秦楠,等 1006001
基于同结构级联的马赫曾德光纤传感器对比研究	孙小婷,龚华平,解铭旸,等 1006002
• 大气与海洋光学 •	
基于视场权重的激光雷达几何因子计算方法	张寅超,王琛,陈和,等 1001001
基于水下光斑跟踪的接收机对准系统	贺锋涛,李思静,杨祎,等 1001002
• 光电子学 •	
基于双掺杂 C ₆₀ :DDQ 陷阱的倍增型有机光电探测器	安涛,吴禧梅,刘欣颖 1025001
键合 Si/Si p-n 结电学输运特性及电场增强效应研究	彭强,何盛泉,任良斌,等 1025002
• 薄膜 •	
Zr 基薄膜金属玻璃的制备及其光学常数测定	吴曼玉,黄水平 1031001
兼容电磁屏蔽红外增透薄膜器件的研究	王建,徐均琪,苏俊宏,等 1031002
• 量子光学 •	
光学分数傅里叶变换的量子理论	张科,李兰兰,余海军,等 1027001
幅值阻尼环境中两体纠缠对量子比特基的依赖性	汪新文,张慧敏,刘珂,等 1027002
• 仪器,测量,度量学 •	
基于北斗卫星精密星历的中高轨望远镜测量精度标定方法	陆长明,高昕,李希宇,等 1012001
宽温紧凑型全量程激光甲烷传感探头设计	庞涛,孙鹏帅,张志荣,等 1012002

• 图像处理 •

结合光谱响应函数和全局方差匹配的遥感图像融合	李俊杰,傅俏燕,姜涛	1010001
多尺度卷积结合自适应双区间均衡化的图像增强	路皓翔,刘振丙,郭棚跃,等	1010002

• 计算机视觉 •

基于双模态卷积神经网络自适应迁移学习的浮选工况识别	廖一鹏,杨洁洁,王志刚,等	1015001
基于改进孪生支持向量机的齿廓图像边缘失真分类研究	孙禾,赵文珍,赵文辉,等	1015002

• 原子与分子物理学 •

基于瞬态效应的原子跃迁操控	李一茁,孙宇杰,王兆英	1002001
---------------------	-------------	---------

• 非线性光学 •

温度对参量下转换输出角度和转换效率的影响	钱远东,夏茂鹏,李健军,等	1019001
----------------------------	---------------	---------

• 散射 •

非负最小二乘约束的加权贝叶斯反演算法研究	梁一卓,刘玲,彭力,等	1029001
----------------------------	-------------	---------

(本期责编:张威)

Contents

• Optical Design and Fabrication •

- Study on Bessel Lens for Picosecond Laser Cutting
.....WEI Zhang-fan, SUN Chuan, GUO Kai, et al 1022001
- Compact Off-axis Two-mirror Freeform Telescopic Optical System Design with Large Relative Aperture
.....ZHOU Xin-ru, SONG Hua-tang, ZHU Run-hui, et al 1022002

• Lasers and Laser Optics •

- Experimental Investigation on High-order Transverse-mode of the Pr:YLF Laser by a Blue Laser-diode Off-axis Pumping
.....ZHANG Feng-chen, HUI Chen-lin, SHU Qi-he, et al 1014001
- Research on Fabrication and Optoelectronic Properties of Surface Modified Silicon by Ultrafast Laser Pulse
.....YANG Yang, LI Chao, ZHAO Ji-hong 1014002

• Fiber Optics and Optical Communications •

- Analysis of Strain Error of FBG Flexible Sensor with Relative Slip under Vertical Pressure
.....GE Zi-yang, WANG Yan, QIN Nan, et al 1006001
- Comparative Study on Same Structure Based Cascaded Mach-Zehnder Optical Fiber Sensor
.....SUN Xiao-ting, GONG Hua-ping, XIE Ming-yang, et al 1006002

• Atmospheric and Oceanic Optics •

- Calculation Method of Lidar Geometric Factor Based on Field of View
.....ZHANG Yin-chao, WANG Chen, CHEN He, et al 1001001
- Receiver Alignment System Based on Underwater Spot Tracking
.....HE Feng-tao, LI Si-jing, YANG Yi, et al 1001002

• Optoelectronics •

- Multiplying Organic Photodetector Based on Double-doped C₆₀:DDQ Trap
.....AN Tao, WU Xi-mei, LIU Xin-ying 1025001
- Study of Electronic Transport Characteristic and Electric Field Enhancement Effect of Wafer-bonded Si/Si p-n Junction
.....PENG Qiang, HE Sheng-quan, REN Liang-bin, et al 1025002

• Thin Films •

- Preparation of Zr-based Thin Film Metallic Glass and Determination of Its Optical Constant
.....WU Man-yu, HUANG Shui-ping 1031001
- Research on Infrared Anti-reflection Thin Film Devices with Compatibility of Electromagnetic Shielding
.....WANG Jian, XU Jun-qi, SU Jun-hong, et al 1031002

• Quantum Optics •

- Quantum Theory of Optical Fractional Fourier Transform
.....ZHANG Ke, LI Lan-lan, YU Hai-jun, et al 1027001

Dependence of Bipartite Entanglement on Qubit-basis in the Amplitude-damping Environment
.....WANG Xin-wen,ZHANG Hui-min,LIU Ke, et al 1027002

• Instrumentation, Measurement and Metrology •

A Method for Evaluating Medium and High-earth Orbit Object Telescope's Precision by Beidou's Precise Ephemeris
.....LU Chang-ming,GAO Xin,LI Xi-yu, et al 1012001

Design of Compact Full-range Laser Methane Sensor with Wide Temperature Range
.....PANG Tao,SUN Peng-shuai,ZHANG Zhi-rong, et al 1012002

• Image Processing •

Remote Sensing Image Fusion Based on Spectral Response Function and Global Variance Matching
.....LI Jun-jie,FU Qiao-yang,JIANG Tao 1010001

Multi-scale Convolution Combined with Adaptive Bi-interval Equalization for Image Enhancement
.....LU Hao-xiang,LIU Zhen-bing,GUO Peng-yue, et al 1010002

• Machine Vision •

Flotation Performance Recognition Based on Dual-modality Convolutional Neural Network Adaptive Transfer Learning
.....LIAO Yi-peng,YANG Jie-jie,WANG Zhi-gang, et al 1015001

Classification of Edge Distortion of Tooth Profile Image Based on Improved Twin Support Vector Machine
.....SUN He,ZHAO Wen-zhen,ZHAO Wen-hui, et al 1015002

• Atomic and Molecular Physics •

Manipulating the Evolution of Atomic Transient Coherent Effect
.....LI Yi-zhuo,SUN Yu-jie,WANG Zhao-ying 1002001

• Nonlinear Optics •

Effect of Temperature on the Output Angle and Conversion Efficiency of Parametric Down Conversion
.....QIAN Yuan-dong,XIA Mao-peng,LI Jian-jun, et al 1019001

• Scattering •

Research on Weighted Bayesian Inversion Algorithm with Non-negative Least Squares Constraint
.....LIANG Yi-zhuo,LIU Ling,PENG Li, et al 1029001