

# 目 次

### · 综述 ·

基于硫系玻璃光纤的红外超连续谱的研究进展	汪 翠 戴世勋 张培晴 等	030001
大模场面积光纤单模运转实现方法的研究进展	赵 楠 李进延	030002
无杂质空位诱导量子阱混杂研究及应用现状	林 涛 孙 航 张浩卿 等	030003
硫系掺铒光波导在光通信的研究进展	李 双 齐 磊 王国祥 等	030004
光电储备池计算系统研究进展	包秀荣	030005
光纤水质检测技术的研究现状与发展趋势	陈 浩 刘月明 邹建宇 等	030006
基于被动调 Q 固体激光器的激光点火系统的研究进展	杨 林 董 俊	030007
艾里光束产生方法的研究进展	程 振 赵尚弘 楚兴春 等	030008
三维显示技术引起的视觉疲劳研究综述	李 静 王阿妮 王君乐 等	030009
基于光纤光栅技术的全光纤单纵模激光器研究进展	许 鸣	030010

### · 光纤光学与光通信 ·

紫外光非直视通信抗干扰中继链路方法及其功率需求分析	李济波 吴晓军 王红星 等	030601
基于长周期光纤光栅和 ZigBee 组网技术的无线溶液折射率传感网络	石 嘉 徐德刚 严德贤 等	030602
紫外光非视距单次散射链路中体散射相函数的研究	何 华	030603

### · 几何光学 ·

人眼色差对夏克-哈特曼波前探测器的影响	解洪升 杨乐宝 李大禹 等	030801
---------------------	---------------	--------

### · 全息 ·

彩色数字全息检测的实时无颜色串扰采集技术研究	杨文明 宋庆和 张亚萍 等	030901
------------------------	---------------	--------

### · 图像处理 ·

基于 NSCT 和仿生模式的人脸图像识别方法	周亮基 李庆武 霍冠英 等	031001
加窗截取改善信号非稀疏表达的稀疏性	杨初平 蔡汶羲 翁嘉文	031002

### · 仪器、测量与计量 ·

干涉条纹带宽与波前斜率分布关系研究	孟晓辰 郝 群 祝连庆	031201
基于光电技术皮棉疵点快速检测方法的研究	张志峰 瞿玉生 郭莹莹 等	031202
基于图像特征融合的无人机位姿测量方法	许 勇 贾 涛	031203
改进阈值的窗口傅里叶变换滤波	蔡长青 张永山	031204
激光共焦透镜轴向间隙测量方法	赵维谦 沈 阳 邱丽荣 等	031205

### · 激光器与激光光学 ·

激光光斑直径对熔覆层裂纹的影响	付福兴 畅庚榕 赵小侠 等	031401
窄线宽 776 nm 激光器的实现及对铷蒸气激光器的影响	左 磊 华卫红 杨子宁 等	031402
GaAs 衬底上氮化硅钝化层的低温制备工艺研究	吴 涛 江先锋	031403
405 nm 波段光栅外腔窄线宽蓝紫光半导体激光器	李 斌 涂 姝 徐勇跃 等	031404

### · 机器视觉 ·

应用灰度直方图特征识别木材表面节子缺陷	宋小燕 白福忠 武建新 等	031501
---------------------	---------------	--------

### · 材料 ·

纳米颗粒固液二相冲击射流数值计算模型研究	马颖辉 姜 芳 徐学锋	031601
二元复合缺陷对一维光子晶体光学特性的影响	何 杰 宋立涛 郭 涛 等	031602

• 医用光学与生物技术 •

白细胞五分类的光学信号检测与处理系统设计 ..... 万里霞 龙伟 张星原等 031701

• 显微 •

大数值孔径物镜下角向偏振光聚焦特性研究 ..... 肖昀 张运海 杨皓昊等 031801

• 非线性光学 •

Compton 散射下正弦三角等离子体中正电子的加速 ..... 张凯萍 毛建景 郝东山 031901

• 散射 •

多角度动态光散射粒度分布递归非负 Phillips-Twomey 算法 ..... 李蕾 杨克成 王万研等 032901

• 光谱学 •

衰减全反射傅里叶变换红外光谱法结合模式识别分析橄榄油中掺杂大豆油的研究 .....

黎远鹏 黄富荣 洪瑞仪等 033001

光源照射下物体有效反射亮度 ..... 姚其 顾蓓蓓 033002

## CONTENTS

• General •

Research Progress of Infrared Supercontinuum Generation in Chalcogenide Glass Fibers ..... Wang Cui Dai Shixun Zhang Peiqing et al. 030001

Progress of Single Mode Propagation Technology in Large Mode Area Fiber ..... Zhao Nan Li Jinyan 030002

Present Status of Impurity Free Vacancy Disordering Research and Application ..... Lin Tao Sun Hang Zhang Haoqing et al. 030003

Process in Erbium-Doped Chalcogenide Waveguide of Optical Communications ..... Li Shuang Qi Lei Wang Guoxiang et al. 030004

Research Progress in Optoelectronic Reservoir Computing System ..... Bao Xiurong 030005

Research Status and Development Trends of Fiber Optical Technology for Water Quality Monitoring ..... Chen Hao Liu Yueming Zou Jianyu et al. 030006

Progress in Laser Ignition Based on Passively Q-Switched Solid-State Lasers ..... Yang Lin Dong Jun 030007

Research Progress of the Generation Methods of Airy Beam ..... Cheng Zhen Zhao Shanghong Chu Xingchun et al. 030008

Visual Discomfort Induced by Three-Dimensional Display Technology ..... Li Jing Wang Ani Wang Junle et al. 030009

Research and Progress of All-Fiber Single-Longitudinal Mode Lasers Based on Fiber Grating Technologies ..... Xu Ou 030010

• Fiber Optics and Optical Communications •

Anti-Interference Relayed Link Method and Power Requirement Analysis for Ultraviolet Non-Line-of-Sight Communication ..... Li Jibo Wu Xiaojun Wang Hongxing et al. 030601

Liquid Refractive Index Wireless Sensor Network Based on Long Period Fiber Grating and ZigBee ..... Shi Jia Xu Degang Yan Dexian et al. 030602

Research on Volume Scattering Phase Function under Ultraviolet Non-Line-of-Sight Single Scattering Link ..... He Hua 030603

• Geometric Optics •

Influence of Chromatic Aberration on Shack-Hartmann Wavefront Sensor ..... Xie Hongsheng Yang Lebao Li Dayu et al. 030801

• Holography •

Research on the Non Color Aliasing Real-Time Acquisition with Color Digital Holography Measurement ..... Yang Wenming Song Qinghe Zhang Yaping et al. 030901

• Image Processing •

Face Image Recognition Method Based on the NSCT and Bionic Pattern ..... Zhou Liangji Li Qingwu Huo Guanying et al. 031001

Window-Added Sampling for Improving Sparsity of Non-Sparse Representation of Signals .....	Yang Chuping	Cai Wenxi	Weng Jiawen	031002
<b>• Instrumentation, Measurement and Metrology •</b>				
Study on Relationship Between Fringe Bandwidth and Wave-Front Slope in Interferometry .....	Meng Xiaochen	Hao Qun	Zhu Lianqing	031201
Research on Method to Measure Cotton Defects Based on Optoelectronic Technique .....	Zhang Zhifeng	Zhai Yusheng	Guo Yingying et al.	031202
Position and Attitude Measurement Method Based on Unmanned Aerial Vehicle Image Feature Fusion .....	Xu Yong	Jia Tao		031203
Windowed Fourier Transform Filter Method with Improved Threshold .....	Cai Changqing	Zhang Yongshan		031204
Lenses Axial Space Measurement by Laser Confocal Technology .....	Zhao Weiqian	Shen Yang	Qiu Lirong et al.	031205
<b>• Lasers and Laser Optics •</b>				
Influence of Laser Spot Diameter on Cladding Layer Cracking .....	Fu Fuxing	Chang Gengrong	Zhao Xiaoxia et al.	031401
Realization of Narrow Linewidth 776 nm Laser and Its Impact on Rubidium Vapor Lasers .....	Zuo Lei	Hua Weihong	Yang Zining et al.	031402
Fabrication Process Study of Silicon Nitride Passivation Layer on GaAs Substrate at Low Temperature .....	Wu Tao	Jiang Xianfeng		031403
Narrow Linewidth Diode Laser with Grating External Cavity in 405 nm Band .....	Li Bin	Tu Pin	Xu Yongyue et al.	031404
<b>• Machine Vision •</b>				
Wood Knot Defects Recognition with Gray-Scale Histogram Features .....	Song Xiaoyan	Bai Fuzhong	Wu Jianxin et al.	031501
<b>• Materials •</b>				
Study on Numerical Calculation Models for Solid-Liquid Two-Phase Impinging Jet with Nanoparticles .....	Ma Yinghui	Jiang Fang	Xu Xuefeng	031601
Optical Characteristics of One-Dimensional Photonic Crystals with Two Element Compound Defect Layers .....	He Jie	Song Litao	Guo Tao et al.	031602
<b>• Medical Optics and Biotechnology •</b>				
Optical Signal Detection and Processing System for WBC Five Classification .....	Wan Lixia	Long Wei	Zhang Xingyuan et al.	031701
<b>• Microscopy •</b>				
Focusing of High Numerical Aperture Azimuthally Polarized Beams .....	Xiao Yun	Zhang Yunhai	Yang Haomin et al.	031801
<b>• Nonlinear Optics •</b>				
Positive Electron Acceleration in Sine Triangulation Plasma under Compton Scattering .....	Zhang Kaiping	Mao Jianjing	Hao Dongshan	031901
<b>• Scattering •</b>				
Particle Size Distribution Measurement by Recursion Nonnegative Phillips-Twomey Analytical Method with Multiangle Dynamic Light Scattering .....	Li Lei	Yang Kecheng	Wang Wanyan et al.	032901
<b>• Spectroscopy •</b>				
Discrimination Analysis of Adulterating Olive Oil with Soybean Oil by Attenuated Total Reflectance-Fourier Transform Infrared Spectrometry Combined with Pattern Recognition Methods .....	Li Yuanpeng	Huang Furong	Xian Ruiyi et al.	033001
Effective Reflection Luminance of Object under Light Source .....	Yao Qi	Gu Beibei		033002