

## 目 次

### • 光电子学与光电器件 •

- 磁镜阵列像增强器的调制传递函数研究 ..... 邹海阳, 唐远河, 华灯鑫(1729)  
亚单层黄色有机发光器件制备与光电性能研究 ..... 杨惠山(1734)

### • 光学材料 •

- 半导体纳米颗粒电子的超快弛豫过程 ..... 陈振宇, 梁瑞生, 黄曙亮, 廖浩祥, 马志俭(1738)  
环境温度对纳米磁流体场诱导光学双折射的影响 ..... 卜胜利, 刘明, 孙国庆(1742)

### • 激光技术 •

- 不同泵浦光下 Nd : GdVO<sub>4</sub> 晶体输出特性 ..... 尤建村, 宋晏蓉, 张怀金(1747)  
啁啾超短激光脉冲对二能级体系特性的调控 ..... 李斌, 李成, 余向阳(1752)  
LD 侧面抽运 Nd : YAP 腔内三倍频蓝光激光器 ..... 胡博宇, 凌铭, 曹丰慧, 金光勇, 梁柱(1757)  
660 nm 单一波长 Nd : YAG 陶瓷激光器 ..... 谭雪春, 武志超, 梁柱(1762)

### • 光学设计 •

- 300~1 100 nm 宽波段光学系统设计 ..... 刘娟娟, 郭帮辉, 吴宏圣, 刘英, 王健, 孙强(1766)  
双谱段全景电晕探测光学系统 ..... 王丽萍(1770)  
子孔径布局对拼接光学系统像质的影响 ..... 刘智颖, 付跃刚, 高天元, 王志坚(1775)  
基于梯度折射率透镜的管道内窥镜设计 ..... 郭俊, 马永利, 张璐, 赵翠玲, 王文生(1780)

### • 光子晶体 •

- 基于光子晶体异质结的高效太阳能电池反射器研究 ..... 李秀杰, 韩培德, 杨毅彪, 梁伟(1786)  
利用冲击波作用光子晶体产生蓝光的研究 ..... 袁纵横, 邢雅丹, 张文涛, 黄静(1790)

### • 量子信息 •

- 二维高效光子晶体偏振分束器 ..... 孙露露, 沈义峰, 王娟, 周杰, 张园, 唐刚(1795)  
量子隐形传态的类簇态信道方案(英文) ..... 钟锋, 于立志, 李春树(1800)  
两量子位 Grover 量子算法 NMR 脉冲序列参量的研究 ..... 彭永刚(1806)  
脉冲激光作用下的量子定位实验方案的设计及分析 ..... 李永放, 王兆华, 李百宏, 王蕾, 李军, 廖桂生(1811)

### • 全息与光信息处理 •

- BR-D96N 薄膜共线全息图像存储实验研究 ..... 阎肃, 门克内木乐, 宁安琪, HAMPP Norbert(1816)  
基于空间光调制器的多层图像的构建与可视化 ..... 梁艳明, 张培晴, 关烨锋, 李丽, 周建英(1820)  
基于互信息的高动态范围成像系统成像质量分析 ..... 马俊, 倪旭翔(1825)  
一种背景误差累积的高光谱图像异常检测算法 ..... 赵春晖, 胡春梅, 包玉刚(1830)

### • 物理光学 •

- 基于液体的电控光学成像系统(英文) ..... 彭润玲, 王大振, 陈家璧, 庄松林(1836)  
微小孔非傍轴衍射光束传输特性的研究 ..... 牛国鉴, 邓小玖, 刘彩霞, 李国祥(1840)  
平顶高斯光束经含失调圆孔光阑的失调光学系统的传输特性 ..... 沈学举, 许芹祖, 王龙, 韩玉东, 王艳奎(1844)

### • 光纤光学与光通信 •

- 大气信道对垂直发收模式紫外光散射通信性能影响的仿真 ..... 丁莹, 佟首峰, 董科研, 姜会林, 付强(1851)  
应用耦合模理论研究光在圆对称双包层光纤中的传输(英文) ..... 徐中南, 刘泽金(1857)

### • 非线性光学 •

- 磁光光纤中光脉冲的非线性传播特性研究 ..... 周晓璟, 武保剑(1862)  
含分压电阻的光折变屏蔽光伏空间灰孤子(英文) ..... 吉选芒, 姜其畅, 王金来, 刘劲松(1867)

多光子非线性 Compton 散射对激光等离子体中强朗缪尔湍动谱的影响 ..... 禹定臣, 郝晓飞, 郝东山(1871)  
随机双折射对光孤子传输影响的研究 ..... 汪仲清, 罗习, 刘志伟, 曹昶, 邬墨家(1875)

• 光学测量 •

基于点线对应的多摄像机全局位姿估计迭代算法 ..... 许允喜, 蒋云良, 陈方, 刘勇(1881)  
LP-DOAS 测量乙二醛时大气中干扰吸收的去除(英文) ..... 彭夫敏, 罗涛, 袁玉鹏, 裴灵光, 谢品华, 刘文清(1889)  
基于 Talbot-Moiré 法测量透镜焦距的 CCD 亚像素标定技术 ..... 吴玲玲, 吴国俊, 仓玉萍, 陈良益(1896)

• 图像与信号处理 •

视频自动聚焦的实现研究 ..... 胡凤萍, 常义林, 马彦卓, 赵光耀(1901)  
二维广义模糊熵图像阈值分割法 ..... 雷博, 范九伦(1907)  
基于多帧参考的整帧丢失错误掩盖算法 ..... 唐浩漾, 史浩山, 张兆林(1915)

本刊已加入《中国期刊全文数据库》、《万方数据-数据库期刊群》、《中国期刊网》、《中国光学期刊网》  
和《中文科技期刊数据库》等。凡被本刊录用的稿件将同时通过因特网进行网络出版或提供信息服务。  
未经《光子学报》编辑部许可,任何人、任何单位不能以任何形式转载、摘编本刊所刊载的作品。

## Contents

• Optoelectronics and Photoelectric Device •

- MTF of Magnetic Mirror Array Image Intensifier ..... GAO Hai-yang ,et al (1729)  
Optical and Electronic Performance of Highly Bright Yellow-Emitting OLED with Sub-Monolayer ..... YANG Hui-shan (1734)

• Optical Material •

- Electron Ultrafast Relaxation Process in Semiconductor Nanoparticles ..... CHEN Zhen-yu ,et al (1738)  
Influence of Ambient Temperature on the Magnetic-field-induced Birefringence of the Nanostructured Magnetic Fluids ..... PU Sheng-li ,et al (1742)

• Laser Technology •

- Output Characteristics of Nd : GdVO<sub>4</sub> Crystal Under Different Pumping ..... YOU Jian-cun ,et al (1747)  
Modulation of Chirped Ultra-short Pulse on Two-level Atom System ..... LI Bin ,et al (1752)  
LD Side-pumped Nd : YAP Intra-cavity Frequency-tripled Blue Laser ..... HU Bo-yu ,et al (1757)  
660 nm Single Wavelength Nd : YAG Ceramic Laser ..... TAN Xue-chun ,et al (1762)

• Optical Design •

- Design of 300~1 100 nm Broad-waveband Optical System ..... LIU Juan-juan ,et al (1766)  
Optical Design for Dual Spectral Panoramic Imaging System Applied in Corona Detector ..... WANG Li-ping (1770)  
Effect of Sub-aperture Distribution on Optical Stitching System ..... LIU Zhi-ying ,et al (1775)  
Design of Pipeline Endoscope Based on Gradient Index Lens ..... GUO Jun ,et al (1780)

• Photonic Crystal •

- Reflector of Solar Cells Based on Photonic Crystal Heterostructures ..... LI Xiu-jie ,et al (1786)  
Blue Light Technology Based Generation by the Interaction Between Shock Wave and Photonic Crystals ..... YUAN Zong-heng ,et al (1790)

• Quantum Information •

- Efficient Polarization Beam Splitter Based on Two-dimensional Photonic Crystal ..... SUN Lu-lu ,et al (1795)  
Quantum Teleportation with Linear Cluster-class States ..... ZHONG Feng ,et al (1800)  
NMR Pulse Sequence Parameters Design of Grover Quantum Algorithm ..... PENG Yong-gang (1806)  
Experimental Scheme Design and Analysis for the Quantum Spatial Positioning with Pulse Laser ..... LI Yong-fang ,et al (1811)

• Holography and Optical Information Processing •

- Collinear Holographic Image Storage with BR-D96N Film ..... YAN Su ,et al (1816)  
Reconstruction and Visualization of Multi-plane Images Based on Spatial Light Modulator ..... LIANG Yan-ming ,et al (1820)  
Image Quality Analysis of High Dynamic Range Imaging System Based on Mutual Information ..... MA Jun ,et al (1825)  
A Kind of Anomaly Detection Algorithm for Hyperspectral Image through Background Error Cumulation ..... ZHAO Chun-hui ,et al (1830)

• Physical Optics •

- Electrically-controlled and Liquid-based Optical Imaging Apparatus ..... PENG Run-ling ,et al (1836)  
Propagation Characteristics of Nonparaxial Scalar Beams Diffracted by a Small Aperture ..... NIU Guo-jian ,et al (1840)  
Propagation Properties of Flattened Gaussian Beams Passing Through an Misaligned Optical System with Misaligned Circular Aperture ..... SHEN Xue-ju ,et al (1844)

• Fiber Optics and Optical Communication •

- Study and Simulation of Atmospheric UV Communication Performance with Vertical Transmitter-Receiver ..... DING Ying ,et al (1851)

Light Propagation in a Circular Double Clad Fiber Using Coupled Mode Method ..... XU Zhong-nan ,et al (1857)

• Nonlinear Optics •

Analysis of Nonlinear Propagating Characteristics of Optical Pulses in Magneto-optic Fibers ..... ZHOU Xiao-jing ,et al (1862)

Grey Screening Photovoltaic Spatial Solitons in Photorefractive Crystal with a Divider Resistance in the External Circuit

..... JI Xuan-mang ,et al (1867)

Influence of Strong Langmuir Turbulence in Laser-plasma by Multi-photon Nonlinear Compton Scattering

..... YU Ding-chen ,et al (1871)

Influence of Optical Soliton Transmission in a Random Birefringent Optical Fiber ..... WANG Zhong-qing ,et al (1875)

• Optical Measurement •

Global Pose Estimation Iterative Algorithm for Multi-camera from Point and Line Correspondences ..... XU Yun-xi ,et al (1881)

Elimination of Atmospheric Interfering Absorption for the Measurement of Glyoxal by LP-DOAS ..... PENG Fu-min ,et al (1889)

Sub Pixel Calibration of Measuring Focal Length of Lens Based on Talbot-Moiré ..... WU Ling-ling ,et al (1896)

• Image and Signal Processing •

Development of the Video Automatic Focus Method ..... HU Feng-ping ,et al (1901)

Image Thresholding Method Based on Two-dimensional Generalized Fuzzy Entropy ..... LEI Bo ,et al (1907)

An Error Concealment Algorithm for Whole Frame Loss Based on Multiple-frame Extrapolation ..... TANG Hao-yang ,et al (1915)