

目 次

• 020 激光器与激光光学 •

飞秒激光与准分子激光制作碲掺杂硅探测器	王熙元	黄永光	刘德伟等	0302001
Nd:YAG 微片激光回馈干涉仪	张永芹	张松	邓勇等	0302002
空间耦合半导体激光器高维混沌系统的光反馈增频与控制	颜森林			0302003
976 nm 光抽运掺 Er ³⁺ 二氧化硅微球产生激光的研究	郭长磊	黄玉	张培进等	0302004
基于延迟自外差方法的调频激光器线型分析	张楠	饶伟	徐攀等	0302005
烧结多孔表面的氨喷雾冷却实验研究	杨强	王宏	陈蓉等	0302006
低阈值随机分布反馈光纤激光器的输出特性	朱俊梅	张伟利	饶云江等	0302007
1270 nm 混合级联掺磷光纤拉曼激光器	漆伟	刘鹏	卢和林等	0302008
内腔连续波 1.9 μm 和 2.4 μm 双波长输出光参量振荡器	孙鑫	毕勇	颜博霞等	0302009
21 W、56 MHz Nd:YVO ₄ 皮秒脉冲激光放大器	麻云凤	余锦	牛岗等	0302010

• 030 激光加工与应用 •

镀钛氧化铝陶瓷与 PET 激光透射连接的工艺研究	高阳阳	刘会霞	李品等	0303001
激光冲击处理对 AZ31B 镁合金冲击韧性的影响	葛茂忠	项建云	张永康等	0303002
连续激光焊接 Fe-Ni 合金工艺参数对焊缝形貌的影响	吴东江	张天武	马广义等	0303003
基于响应曲面法的激光透射连接硅与玻璃的工艺研究	薛国春	刘会霞	李品等	0303004
激光立体成形锆基块体非晶合金的组织特征	张莹	林鑫	杨高林等	0303005
CL60 车轮材料表面激光离散熔凝的滚动磨损形貌	邢旭辉	李正阳	杨明江等	0303006
灰铸铁表面激光热修复过程建模及热响应分析	伊鹏	许鹏云	殷克平等	0303007

• 050 光纤光学与光通信 •

基于双长周期光纤光栅边缘滤波的光纤布拉格光栅解调系统	朱珠	梁大开	孙红兵	0305001
大角度偏振无关硅膜光子晶体宽带滤波器	陈志勇	郝小龙	郑彦敏等	0305002
基于数字信号处理机的水下光通信收发系统设计及分析	胡秀寒	周田华	贺岩等	0305003
连续变量量子密钥分发系统中同步方案及实验实现	申泽源	房坚	何广强等	0305004
光纤表面等离子体共振传感器锥型探头的研制	张鹏程	吕敏	陈笑等	0305005
大模场光纤直弯过渡中的模场演变分析	廖素英	巩马理		0305006
矩形晶格双芯光子晶体光纤的耦合特性	耿开胜	关建飞		0305007

• 070 薄膜 •

589 nm 激光器光路整合系统滤光膜的研制	付秀华	黄金龙	莫朝燕等	0307001
高斯分布激光前向转印 Cu 薄膜形貌及机理	刘威	窦广彬	王春青等	0307002
“加窗”傅里叶变换表征极紫外薄膜	段伟	王凤丽	李文斌等	0307003
场电子激励下 ZnO 纳米晶薄膜的紫外发光特性	宋科田	林祖伦	李春	0307004

• 080 测量与计量 •

基于无衍射栅型结构光投影的角膜轮廓测量 周莉萍 干江红 徐 龙 0308001

二维快速傅里叶变换干涉图相位提取误差分析 张 敏 唐 锋 王向朝等 0308002

基于位置敏感探测器的激光位移传感器小波优化方法 郝继贵 陈 浩 薛 彬 0308003

小角弹性光散射粒径测量技术与准确性验证 孙 晗 Grazia Lamanna Bernhard Weigand 0308004

单向激光测距及其测量试验 张海峰 孟文东 吴志波等 0308005

新型微弱受激散射光能量信号检测方法 王坤朋 柴 毅 苏春晓等 0308006

光纤故障可视的混沌光时域反射测量方法 张 丽 王安帮 李 凯等 0308007

基于多像素光子计数器的弱本振激光外差信噪比分析 张合勇 刘立生 赵 帅等 0308008

机械刻划光栅的刻线弯曲与位置误差对平面光栅性能影响及其修正方法 李晓天 巴音贺希格 齐向东等 0308009

• 090 全息与信息处理 •

基于空间光调制器的计算全息再现像放大技术 王 皓 毕 勇 李 芳等 0309001

• 130 大气与海洋光学 •

月球激光测距自适应光学系统回波统计分析 陈京元 常 翔 周 钰等 0313001

• 170 光电子学 •

高效激光无线能量传输及转换实验 何 滔 杨苏辉 张海洋等 0317001

CONTENTS

• 020 LASERS AND LASER OPTICS •

Fabrication of Tellurium Doped Silicon Detector by Femtosecond Laser and Excimer Laser
..... Wang Xiyuan Huang Yongguang Liu Dewei et al. 0302001

Nd:YAG Microchip Laser Feedback Interferometer Zhang Yongqin Zhang Song Deng Yong et al. 0302002

Frequency Enhancement and Control of Chaos in Two Spatial Coupled Semiconductor Lasers Using Optical Feedback Yan Senlin 0302003

Study of Laser Emission from Er³⁺-Doped Silica Microsphere Pumped by 976 nm Light
..... Guo Changlei Huang Yu Zhang Peijin et al. 0302004

Line Shape Analysis of Frequency-Modulated Laser with Delayed Self-Heterodyne Method Zhang Nan Rao Wei Xu Pan et al. 0302005

Experimental Study of Spray Cooling on a Sintered Porous Surface with Ammonia Yang Qiang Wang Hong Chen Rong et al. 0302006

Output Characteristics of Low-Threshold Random Distributed Feedback Fiber Laser
..... Zhu Junmei Zhang Weili Rao Yunjiang et al. 0302007

1270 nm Hybrid Cascaded Phosphosilicate Fiber Raman Laser Qi Wei Liu Peng Lu Helin et al. 0302008

Intracavity Continuous-Wave Optical Parametric Oscillator with 1.9 μm and 2.4 μm Dual-Wavelength Output
..... Sun Xin Bi Yong Yan Boxia et al. 0302009

Research on 21 W and 56 MHz Nd:YVO₄ Picosecond Pulse Laser Ma Yunfeng Yu Jin Niu Gang et al. 0302010

• 030 LASER PROCESSING AND APPLICATIONS •

Study of Laser Transmission Joining Characteristics for Ti Coated Alumina Ceramic and PET
..... Gao Yangyang Liu Huixia Li Pin et al. 0303001

Effect of Laser Shock Processing on Impact Toughness of AZ31B Magnesium Alloy
..... Ge Maozhong Xiang Jianyun Zhang Yongkang et al. 0303002

Influence of Welding Parameters on the Morphology of Fe-Ni Alloy with Continuous Wave YAG Laser
..... Wu Dongjiang Zhang Tianwu Ma Guangyi et al. 0303003

Process Study on Laser Transmission Bonding of Silicon with Glass via Response Surface Methodology
..... Xue Guochun Liu Huixia Li Pin et al. 0303004

Structural Characteristics of Laser Solid Forming Zr-Based Bulk Metallic Glass Zhang Ying Lin Xin Yang Gaolin et al. 0303005

Rolling Wear Properties of CL60 Steel after Pulsed Nd:YAG Laser Surface Melting
..... Xing Xuhui Li Zhengyang Yang Mingjiang et al. 0303006

Laser Thermo-Repairing Process Modeling and Thermal Response Analysis on Gray Cast Iron Surface
..... *Yi Peng Xu Pengyun Yin Keping et al.* 0303007

• 050 **FIBER OPTICS AND OPTICAL COMMUNICATIONS** •

Double-Edged Filter Wavelength Demodulation System for Fiber Bragg Gratings Based on Long Period Fiber Grating
..... *Zhu Zhu Liang Dakai Sun Hongbing* 0305001

Large-Angle Polarization-Independent Broadband Filters Based on Silicon Photonic Crystal Slabs
..... *Chen Zhiyong Hao Xiaolong Zheng Yanmin et al.* 0305002

Design and Analysis of Underwater Optical Communication Transceiver System Based on Digital Signal Processor
..... *Hu Xiuhua Zhou Tianhua He Yan et al.* 0305003

Synchronous Scheme and Experimental Realization in Continuous Variable Quantum Key Distribution System
..... *Shen Zeyuan Fang Jian He Guangqiang et al.* 0305004

Study and Fabricate of Surface-Plasmon-Resonance Fiber Optic Sensor with Tapered Probe
..... *Zhang Pengcheng Lü Min Chen Xiao et al.* 0305005

Analysis of Mode Evolution between Straight and Curved Fiber Transition in Large Mode Area Fibers *Liao Suying Gong Mali* 0305006

Coupling Characteristics of Dual-Core Photonic Crystal Fiber with Rectangular Lattice *Geng Kaisheng Guan Jianfei* 0305007

• 070 **THIN FILMS** •

Design and Fabrication of 589 nm Laser Optical Path Integration System Filter Film
..... *Fu Xinhua Huang Jinlong Mo Zhaoyan et al.* 0307001

Morphology and Mechanism of Gaussian Distributed Laser Induced Forward Transfer Cu Film
..... *Liu Wei Dou Guangbin Wang Chunqing et al.* 0307002

Windowed Fourier Transform to Characterize Extreme Ultraviolet Thin Film Structures
..... *Duan Wei Wang Fengli Li Wenbin et al.* 0307003

Ultraviolet Luminescent Characteristics of ZnO Nano-Crystal Film under Field Emission Electron Excitation
..... *Song Ketian Lin Zulun Li Chun* 0307004

• 080 **MEASUREMENT AND METROLOGY** •

Corneal Contour Measurement Based on Non-Diffracting Grating Structure Light Projection
..... *Zhou Liping Gan Jianghong Xu Long* 0308001

Phase Retrieval Errors Analysis of Interferogram Using Two Dimensional Fast Fourier Transform Method
..... *Zhang Min Tang Feng Wang Xiangzhao et al.* 0308002

Wavelet Optimization Method of Laser Displacement Sensor Based on Position Sensitive Detector
..... *Zhu Jigui Chen Hao Xue Bin* 0308003

Measurement Technique and Verification of Accuracy for Particle Sizing by Low Angle Elastic Light Scattering
..... *Sun Han Grazia Lamanna Bernhard Weigand* 0308004

One Way Laser Ranging and Its Measuring Experiment *Zhang Haifeng Meng Wendong Wu Zhibo et al.* 0308005

Novel Method for Detection of Weak Stimulated Scattering Light Energy Signal *Wang Kunpeng Chai Yi Su Chunxiao et al.* 0308006

Fiber Fault Visible Chaotic Optical Time Domain Reflectometry Measurement Method *Zhang Li Wang Anbang Li Kai et al.* 0308007

Analysis of Signal to Noise Ratio for Laser Heterodyne with Weak Local Oscillator Based on Multi-pixel Photon Counter
..... *Zhang Heyong Liu Lisheng Zhao Shuai et al.* 0308008

Influence and Revising Method of Machine-Ruling Grating Line's Curve Error, Location Error on Plane Grating's Performance
..... *Li Xiaotian Bayanheshig Qi Xiangdong et al.* 0308009

• 090 **HOLOGRAPHY AND INFORMATION PROCESSING** •

Enlargement Technology of Reconstructed Image of Computer Generated Hologram Based on Spatial Light Modulator
..... *Wang Hao Bi Yong Li Fang et al.* 0309001

• 130 **ATMOSPHERIC AND OCEANIC OPTICS** •

Statistical Analysis of Received Photons for Lunar Laser Ranging System with Adaptive Optics
..... *Chen Jingyuan Chang Xiang Zhou Yu et al.* 0313001

• 170 **OPTOELECTRONICS** •

Experiment of Space Laser Energy Transmission and Conversion with High Efficiency
..... *He Tao Yang Suhui Zhang Haiyang et al.* 0317001