

## 目 次

### • 020 激光器与激光光学 •

基于 808 nm 半导体激光器单管合束技术的光纤耦合模块 .....	朱洪波	郝明明	彭航宇 等	0502001
靶场编组站镜箱温度场稳定性影响及优化分析 .....	周 忆	杨 品	廖云飞 等	0502002
高功率窄脉冲垂直腔面发射激光器 n-DBR 反射率的优化 .....	张立森	宁永强	张 星 等	0502003
三倍频激光下金属颗粒对熔石英元件损伤阈值的影响 .....	王立斌	马伟新	季来林 等	0502004
氧化孔径对高功率垂直腔面发射激光器温升的影响 .....	刘 迪	宁永强	秦 莉 等	0502005
半导体激光器阵列的“Smile”效应对光束质量的影响 .....	郎 超	尧 舜	陈丙振 等	0502006
抑制 Nd:YAG 激光器自锁模的实验研究 .....	田 飞	罗 佳	胡大平等	0502007
单端光纤耦合的声光调 Q 全光纤化光纤激光器 .....	何 晶	赵宏明	周 军 等	0502008
高脉冲稳定性的 100 kHz 皮秒再生放大器 .....	黄玉涛	樊仲维	牛 岗 等	0502009
反射各向异性谱在线监测 852 nm 半导体激光器 AlGaInAs/AlGaAs 量子阱的 MOCVD 外延生长 .....				
.....	徐华伟	宁永强	曾玉刚 等	0502010
基于不同非共线结构的光参量放大器的带宽特性研究 .....	刘 涛	贾惠彬	项洪印 等	0502011
大口径 KDP 晶体加工相位扰动与三次谐波转换 .....	季来林	刘 崇	唐顺兴 等	0502012
基于 YCOB 晶体分析信号光脉冲时间特性对光参变啁啾脉冲放大光谱和转换效率的影响 .....				
.....	王楠楠	孙美智	徐婷婷 等	0502013
采用改进的单神经元 PID 控制算法提高光栅拼接精度的方法 .....	王 聪	杜 丽	张军伟 等	0502014
激光陀螺中朗缪尔流形的研究 .....	汪之国	龙兴武	王 飞	0502015

### • 030 激光加工与应用 •

选区激光熔化成型悬垂结构的计算机辅助工艺参数优化 .....	刘 杰	杨永强	王 迪 等	0503001
飞秒激光烧蚀高定向热解石墨的超快过程研究 .....	张 楠	杨景辉	朱晓农	0503002
基于应变速率的激光喷丸强化 6061-T6 铝合金力学性能分析 .....	周建忠	左立党	黄 舒 等	0503003
工艺参数对激光冲击微造型效果的影响 .....	黄志辉	刘会霞	沈宗宝 等	0503004
镀锌钢激光添粉焊接的等离子体监测机理 .....	张 屹	段林勇	周馆武 等	0503005

### • 040 激光医学与生物学 •

白细胞光学模型及其相位分布特征分析 .....	徐媛媛	王亚伟	金卫凤 等	0504001
基于光学相干层析散斑的流速测量方法 .....	杨 柳	洪 威	王 川 等	0504002
基于拉曼光谱的鼻咽癌与正常鼻咽细胞株的分类研究 .....	叶宇煌	陈 阳	李永增 等	0504003
金颗粒为活性基底的裸鼠血清表面增强拉曼散射光谱分析 .....	刘书朋	朱鸿飞	陈 娜 等	0504004

### • 050 光纤光学与光通信 •

基于内全反射微环空气孔型光子晶体光分插滤波器 .....	蒋俊贞	强则焯	许晓赋 等	0505001
基于倏逝波吸收的塑料光纤葡萄糖传感特性 .....	初凤红	王计元		0505002
基于氢气填充空芯光子晶体光纤的全光纤型气体拉曼光源特性 .....			陈晓东	0505003
基于准正交空时分组编码的空间激光通信 .....		邢雪峰	李洪祚	0505004
全光纤锁模腔结构的全光时钟提取实验研究 .....	王顺艳	江 阳	吴次南 等	0505005

• 060 材料 •	
Nd:Lu <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> 晶体光谱与激光性能研究 .....	王晓丹 徐晓东 王静雅 等 0506001
• 070 薄膜 •	
飞秒激光抽运-探测法对金纳米薄膜非平衡传热的研究 .....	朱丽丹 孙方远 祝捷 等 0507001
InGaAs 探测器片上集成滤光膜的微结构与性能 .....	王云姬 唐恒敬 李雪 等 0507002
热处理对脉冲激光沉积羟基磷灰石薄膜组织和性能的影响 .....	吴健 许立立 杨森 0507003
• 080 测量与计量 •	
基于旋转 LED 线阵列全景三维显示系统的模拟及串扰分析 .....	曹子盛 李海峰 姚振宁 等 0508001
波长调谐随机移相算法的研究 .....	郭仁慈 李建欣 朱日宏 等 0508002
基于正交双频光栅投影的在线三维检测 .....	武迎春 曹益平 史顺平等 0508003
冷原子束在线检测系统 .....	王晓佳 冯焱颖 薛洪波 0508004
利用空域滤波虚光栅叠栅法提取干涉图波面 .....	王军 陈磊 吴泉英 0508005
• 090 全息与信息处理 •	
能有效抑制光盘数据和值的方法 .....	刘涛 阮昊 0509001
• 110 太赫兹技术 •	
基于 D <sub>2</sub> O 的光抽运腔式太赫兹波激光谱线竞争 .....	梁平元 孟猛 罗锡璋 0511001
• 140 遥感与传感器 •	
微脉冲激光雷达探测大气气溶胶定标反演新方法 .....	陈涛 赵玉洁 刘东 等 0514001
• 160 光学设计与制造 •	
宽光谱大视场角的高衍射效率多层衍射元件 .....	范长江 赵亚辉 应朝福 等 0516001
• 简 讯 •	
瓦级连续波 2.8 μm 中红外 Er:ZBLAN 光纤激光器 .....	黄园芳 彭跃峰 魏星斌 等 0502007-5
全光纤结构掺铋光纤激光器实现百瓦级高功率输出 .....	吕海斌 张汉伟 粟荣涛 等 0502010-6

## CONTENTS

• 020 LASERS AND LASER OPTICS •	
Module of Fiber Coupled Diode Laser Based on 808 nm Single Emitters Combination .....	<i>Zhu Hongbo Hao Mingming Peng Hangyu et al.</i> 0502001
Stability Impact and Optimization Analysis of Temperature Field of Switchyard Mirror Box in ICF Target Area .....	<i>Zhou Yi Yang Pin Liao Yunfei et al.</i> 0502002
Optimization of n-DBR in High Power Vertical-Cavity Surface-Emitting Laser under a Short Pulsed Operation .....	<i>Zhang Lisen Ning Yongqiang Zhang Xing et al.</i> 0502003
Influence of Metal Particles on Damage Threshold of Fused Silica at 3ω .....	<i>Wang Libin Ma Weixin Ji Lailin et al.</i> 0502004
Effect of Oxide Aperture on Temperature Rise in High Power Vertical-Cavity Surface-Emitting Laser .....	<i>Liu Di Ning Yongqiang Qin Li et al.</i> 0502005
"Smile" Effect on the Beam Quality for Diode Laser Arrays .....	<i>Lang Chao Yao Shun Chen Bingzhen et al.</i> 0502006
Experimental Study on Eliminating Self-Mode Locking of Nd:YAG Laser .....	<i>Tian Fei Luo Jia Hu Daping et al.</i> 0502007
Single-Ended Fiber Coupled Acousto-Optic Q-Switched All-Fiber Laser .....	<i>He Jing Zhao Hongming Zhou Jun et al.</i> 0502008
100 kHz Repetition Rate Picosecond Regenerative Amplifier with High Pulse Stability .....	<i>Huang Yutao Fan Zhongwei Niu Gang et al.</i> 0502009
MOCVD Growth of AlGaInAs/AlGaAs Quantum Well for 852 nm Laser Diodes Studied by Reflectance Anisotropy Spectroscopy .....	<i>Xu Huawei Ning Yongqiang Zeng Yugang et al.</i> 0502010
Bandwidth Investigation of Optical Parametric Amplifier in Different Noncollinear Geometries .....	<i>Liu Tao Jia Huibin Xiang Hongyin et al.</i> 0502011
Phase Perturbation of Large Aperture KDP Crystal Manufacture and Effects on Third Harmonics Generation .....	<i>Ji Lailin Liu Chong Tang Shunxing et al.</i> 0502012

Analysis of Optical Parametric Chirped Pulse Amplification Spectrum and Conversion Efficiency Resulting from Time Characteristics of Signal Pulse Based on YCOB Crystal .....	<i>Wang Nannan Sun Meizhi Xu Tingting et al.</i>	0502013
Advancing Precision of Grating Tiling with Modified Single Neuron Adaptive PID Control Algorithm .....	<i>Wang Cong Du Li Zhang Junwei et al.</i>	0502014
Research on Langmuir Flow Patterns in Laser Gyros .....	<i>Wang Zhiguo Long Xingwu Wang Fei</i>	0502015
<b>• 030 LASER PROCESSING AND APPLICATIONS •</b>		
Computer-Aided Optimization of the Process Parameters for Fabricating Overhanging Structure by Selective Laser Melting .....	<i>Liu Jie Yang Yongqiang Wang Di et al.</i>	0503001
Investigation of the Ultrafast Process of Femtosecond Laser Ablation of Highly Oriented Pyrolytic Graphite .....	<i>Zhang Nan Yang Jinghui Zhu Xiaonong</i>	0503002
Analysis on Mechanical Property of 6061-T6 Aluminum Alloy by Laser Shot Peening Based on Strain Rate .....	<i>Zhou Jianzhong Zuo Lidang Huang Shu et al.</i>	0503003
Process Parameters Analysis on Surface Texturing under Laser Shock Peening .....	<i>Huang Zhihui Liu Huixia Shen Zongbao et al.</i>	0503004
Monitoring Mechanism of Plasma Generated by Laser Welding Galvanized Steel with Powder Feeding .....	<i>Zhang Yi Duan Linyong Zhou Dianwu et al.</i>	0503005
<b>• 040 LASER MEDICINE AND BIOLOGY •</b>		
Study on Phase Characteristics of White Blood Cells and Their Optical Models ...	<i>Xu Yuanyuan Wang Yawei Jin Weifeng et al.</i>	0504001
Flow Velocity Measurement Based on Speckle in Optical Coherence Tomography .....	<i>Yang Liu Hong Wei Wang Chuan et al.</i>	0504002
Discrimination of Nasopharyngeal Carcinoma and Normal Nasopharyngeal Cell Lines Based on Confocal Raman Microspectroscopy .....	<i>Ye Yuhuang Chen Yang Li Yongzeng et al.</i>	0504003
Surface Enhanced Raman Scattering Spectrum Analysis of Nude Mouse Serum with Au Nanoparticles Active Substrate .....	<i>Liu Shupeng Zhu Hongfei Chen Na et al.</i>	0504004
<b>• 050 FIBER OPTICS AND OPTICAL COMMUNICATIONS •</b>		
Air-Hole Type Photonic Crystal Add-Drop Filters Based on Total-Internal-Reflection Ring Resonators .....	<i>Jiang Junzhen Qiang Zexuan Xu Xiaofu et al.</i>	0505001
Glucose Evanescent Absorption Sensor by Using Plastic Optical Fiber .....	<i>Chu Fenghong Wang Jiyuan</i>	0505002
Characteristics of All-Fiber Gas Raman Light Source Based on Hydrogen-Filled Hollow-Core Photonic Crystal Fiber .....	<i>Chen Xiaodong</i>	0505003
Space Laser Communications Based on Quasi-Orthogonal Space-Time Block Coding .....	<i>Xing Xuefeng Li Hongzuo</i>	0505004
Experimental Study on All-Optical Clock Recovery of All-Fiber Mode-Locking Cavity Configuration .....	<i>Wang Shunyan Jiang Yang Wu Cinan et al.</i>	0505005
<b>• 060 MATERIALS •</b>		
Spectrum and Laser Properties of Nd:Lu <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> Crystal .....	<i>Wang Xiaodan Xu Xiaodong Wang Jingya et al.</i>	0506001
<b>• 070 THIN FILMS •</b>		
Study on Nonequilibrium Heat Transfer in Au Nano Metal Films by Femtosecond Laser Pump and Probe Method .....	<i>Zhu Lidan Sun Fangyuan Zhu Jie et al.</i>	0507001
Microstructure and Performance of the Integrated Filter Film on InGaAs Detector ...	<i>Wang Yunji Tang Hengjing Li Xue et al.</i>	0507002
Influence of Heat Treatment on the Microstructure and Properties of Pulsed Laser Deposited Hydroxyapatite Thin Films .....	<i>Wu Jian Xu Lili Yang Sen</i>	0507003
<b>• 080 MEASUREMENT AND METROLOGY •</b>		
Simulation and Crosstalk Analysis of 360° Three-Dimensional Display System Based on Rotating LED Line Array .....	<i>Cao Zisheng Li Haifeng Yao Zhenning et al.</i>	0508001
Research on the Randomly Phase Shifting Algorithm with Wavelength Tuning .....	<i>Guo Renhui Li Jianxin Zhu Rihong et al.</i>	0508002
On-Line Three-Dimensional Inspection Based on Orthogonal Two-Frequency Grating Projection .....	<i>Wu Yingchun Cao Yiping Shi Shunping et al.</i>	0508003
An Online Detection System for Atomic Beam .....	<i>Wang Xiaojia Feng Yanying Xue Hongbo</i>	0508004
Wavefront Acquisition of Single Interferogram Using the Virtual Grating Moiré Fringe Method with Gaussian Filter in the Spatial Domain .....	<i>Wang Jun Chen Lei Wu Quanying</i>	0508005
<b>• 090 HOLOGRAPHY AND INFORMATION PROCESSING •</b>		
Method to Effectively Inhibit Digital Sum Value of the Optic Disc Data .....	<i>Liu Tao Ruan Hao</i>	0509001
<b>• 110 TERAHERTZ TECHNOLOGY •</b>		
Laser Line Competition in Optically Pumped D <sub>2</sub> O Cavity Terahertz Wave .....	<i>Liang Pingyuan Meng Meng Luo Xizhang</i>	0511001
<b>• 140 REMOTE SENSING AND SENSORS •</b>		
Inversion of Micro-Pulse Lidar Signals with a New Calibration Method .....	<i>Chen Tao Zhao Yujie Liu Dong et al.</i>	0514001
<b>• 160 OPTICAL DESIGN AND FABRICATION •</b>		
Multilayer Diffraction Element with Wide Field of View and High Diffractive Efficiency .....	<i>Fan Changjiang Zhao Yahui Ying Chaofu et al.</i>	0516001