

目 次

• 020 激光器与激光光学 •

大模场双包层掺镱光子晶体光纤反射式石墨烯被动调 Q 锁模激光器	李平雪	赵自强	张光举 等	0402001
基于电光开关的增益控制法准分子激光 ASE 抑制技术研究	胡 云	赵学庆	朱永祥 等	0402002
76% 光电转换效率梯度渐变折射率结构 940 nm 半导体激光器	蒋 锴	李沛旭	沈 燕 等	0402003
CCEPS 激光器水冷设计的流-固耦合传热数值研究	刘 刚	唐晓军	徐璠婧 等	0402004
百瓦级全光纤掺铥光纤激光器及超荧光光源	刘 江	刘 昆	谭方舟 等	0402005
混合放大 100 MHz 高重复频率窄脉宽单频激光器	刘 崇	张 翔	叶志斌 等	0402006
激光陀螺环形谐振腔抑制比优化控制研究	马仰华	张自国	韩宗虎	0402007
2 kW 射频板条 CO ₂ 激光器输出光束整形特性研究	肖龙胜	唐霞辉	秦应雄 等	0402008
石墨烯实现 Nd:YVO ₄ 激光器 1064 nm 和 1342 nm 双波长被动调 Q	梁 莉	林正怀	陈 狮 等	0402009

• 030 激光加工与应用 •

热处理对激光熔化沉积 TC17 钛合金显微组织及力学性能的影响	陈 博	邵 冰	刘 栋 等	0403001
激光冲击 AZ31 镁合金抗腐蚀性能研究	李兴成	张永康	卢雅琳 等	0403002
激光焊接三明治结构 T 型接头的研究	杨橄生	于治水	卢庆华 等	0403003
激光驱动飞片复杂轮廓多孔微冲裁实验及模拟	陆萌萌	刘会霞	沈家宝 等	0403004
金属正畸托槽皮秒激光清洗实验及其机理研究	凌 晨	季凌飞	吴 燕 等	0403005
数值模拟驱动的激光透射焊接 PET 与 304L 不锈钢的优化研究	陈 浩	王 霄	刘会霞 等	0403006
镍基高温合金纳秒激光脉冲制孔再铸层形成过程数值模拟	罗 焱	庞盛永	周建新 等	0403007
激光热丝焊接过程焊丝过渡行为及其稳定性的研究	郑世卿	温 鹏	单际国	0403008
激光强化灰铸铁导轨的微观组织及磨损性能	邓 猛	王义强	谷 岩 等	0403009
金属板料激光冲击成形及其破裂行为研究	张青来	王 荣	洪妍鑫 等	0403010
激光工艺参数对打标彩色效果的影响	刘忠民	张庆茂	郭 亮 等	0403011

• 050 光纤光学与光通信 •

基于压缩脉冲载波的远端上变频光载射频系统	闻 和	陈宽桐	郑小平 等	0405001
探测器非线性对可见光通信系统幅频响应的影响	唐丹颖	李洪磊	陈雄斌 等	0405002
耗散孤子脉冲的放大和超连续光谱的产生	张巨慧	胡明列	刘博文 等	0405003
超弱反射光栅准分布式光纤传感系统研究	张彩霞	张震伟	郑万福 等	0405004
基于谐振波导光栅的偏振选择广角光探测器	胡劲华	黄永清	段晓峰 等	0405005

• 060 材料 •

含色散负折射率缺陷一维 Sinc 函数型光子晶体的光学传输特性	王 筠	刘 丹	刘 勇	0406001
---------------------------------------	-----	-----	-----	---------

• 080 测量与计量 •

基于异面交会模型的立体视觉像机站位优化研究	王 伟	于之靖	郭 寅 等	0408001
基于星点像的环形光瞳快速相位复原	陈新华	沈为民		0408002
大口径凸非球面面形检测方法研究	宋 强	杨宝喜	袁 乔 等	0408003
双频激光干涉测量中的环境补偿技术	池 峰	朱 煜	张志平等	0408004
微尺度碳粒的激光诱导辐射非傅里叶现象分析	陈玲红	左 磊	吴 建 等	0408005

• 090 全息与信息处理 •

视轴抖动对成像质量影响的研究	王婉婷	郭 劲	姜振华 等	0409001
数字显微全息应用于磁流变液微观结构与机理的三维可视化研究	王秋宽	杨 鸿	李光勇 等	0409002
基于内插与外推的数字全息分辨率增强方法	夏好广	张佳辰	纪晓丽 等	0409003
基于圆偏振光干涉的相移数字全息术理论与实验研究	朱竹青	李 杨	冯少彤 等	0409004

- 110 太赫兹技术 •
- 基于光子混频的可调谐连续太赫兹波辐射系统 史同璐 刘建军 洪 治 0411001
- 130 大气与海洋光学 •
- 非科尔莫哥罗夫湍流下超连续谱光源的传输特性 孙海跃 吴武明 靳爱军等 0413001
- 140 遥感与传感器 •
- 影响机载激光扫描点云精度的测量误差因素分析及其影响大小排序 王建军 刘吉东 0414001
- 150 光谱学 •
- 相干布居囚禁原子钟光频移性能优化 张 艳 张 奕 尹 毅等 0415001
- 新型光声腔的设计及实验分析 郑德忠 赵 南 0415002
- $AlCl_3$ 水溶液和混合溶液中 Al 元素的双脉冲激光诱导击穿光谱 王 莉 徐 丽 周 彧等 0415003
- $12Cr1MoV$ 晶粒度等级与激光诱导击穿光谱特性的关联性研究 戴 沅 董 璇 钟万里等 0415004
- 160 光学设计与制造 •
- 一种实现离轴非球面反射镜离轴量和离轴角精确测量的方法 张学敏 魏儒义 于 涛等 0416001
- 基于 Matlab 的变焦光学系统设计 高铎瑞 钟刘军 赵 昭等 0416002
- 共轭距可变的光刻投影物镜光学设计 蔡燕民 王向前 黄忠杰 0416003
- 180 量子光学 •
- 实验实现频差 9.2 GHz 两束光在同一腔中的双共振与空间分离 马 荣 李 媛 冯景亮等 0418001
- 简讯 •
- 流延成型 YAG/Yb:YAG/YAG 多层复合陶瓷激光器 杨祥辉 李文雪 杨康文等 0403002-6

CONTENTS

- 020 LASERS AND LASER OPTICS •
- Large-Mode-Area Double-Cladding Yb-Doped Photonic Crystal Fiber Q-Switched Mode-Locked Laser with Graphene-Based Saturable Absorber Mirror *Li Pingxue Zhao Ziqiang Zhang Guangju et al.* 0402001
- Study of Gain Control Method Based on Electro-Optical Switch for ASE Suppression of Excimer Laser *Hu Yun Zhao Xueqing Zhu Yongxiang et al.* 0402002
- 76% Maximum Wall Plug Efficiency of 940 nm Laser Diode with Step Graded Index Structure *Jiang Kai Li Peixu Shen Yan et al.* 0402003
- Fluid-Solid Coupled Heat Transfer Design Numerical Study for Water Cooling CCEPS Laser *Liu Gang Tang Xiaojun Xu Liuqing et al.* 0402004
- Hundred-Watt-Level All-Fiber Thulium-Doped Fiber Laser and Superfluorescent Source *Liu Jiang Liu Kun Tan Fangzhou et al.* 0402005
- Single Frequency Laser with 100 MHz Repetition Rate and 1 ns Pulse Width Using Combined Amplification *Liu Chong Zhang Xiang Ye Zhibin et al.* 0402006
- Investigation of Optimal Mode Suppression Ratio of Laser Gyro Ring Resonator *Ma Yanghua Zhang Ziguo Han Zonghu* 0402007
- Shaping Characteristics of Output Beam of 2 kW Radio Frequency Slab CO_2 Laser *Xiao Longsheng Tang Xiaohui Qin Yingxiong et al.* 0402008
- Graphene Passively Q-Switching for Dual-Wavelength Lasers at 1064 nm and 1342 nm in Nd:YVO₄ laser *Liang Li Lin Zhenghuai Chen Shi et al.* 0402009
- 030 LASER PROCESSING AND APPLICATIONS •
- Effect of Heat Treatment on Microstructure and Mechanical Properties of Laser Melting Deposited TC17 Titanium Alloy *Chen Bo Shao Bing Liu Dong et al.* 0403001
- Research of Corrosion Resistance for AZ31 Magnesium Alloy by Laser Shock Processing *Li Xingcheng Zhang Yongkang Lu Yalin et al.* 0403002
- Study of Laser Welding T-Joint of Sandwich Structure *Yang Gansheng Yu Zhishui Lu Qinghua et al.* 0403003
- Experiment and Simulation of Multihole Micro-Punching with Complex Layouts by Laser-Driven Flyer *Lu Mengmeng Liu Huixia Shen Zongbao et al.* 0403004
- Research and Mechanism Study on Refurbishing Stainless Bracket Using Picosecond Laser Based on Laser Cleaning Technology *Ling Chen Ji Lingfei Wu Yan et al.* 0403005
- Numerical Simulation-Driven Optimization of Laser Transmission Welding Process Between PET and 304L Stainless Steel *Chen Hao Wang Xiao Liu Huixia et al.* 0403006
- Numerical Simulation of Recast Layer Formation in Nanosecond Pulse Laser Drilling on Nickel-Based High-Temperature Alloy *Luo Yao Pang Shengyong Zhou Jianxin et al.* 0403007
- Research on Wire Transfer and Its Stability in Laser Hot Wire Welding Process *Zheng Shiqing Wen Peng Shan Jiguo* 0403008

Microstructure and Wear Behavior of Laser Hardened Gray Cast Iron Guideway	<i>Deng Meng Wang Yiqiang Gu Yan et al.</i>	0403009
Study on Laser Shock Forming and Fracture Behavior of Metal Sheet	<i>Zhang Qinglai Wang Rong Hong Yanxin et al.</i>	0403010
Influence of Laser Process Parameters on Color Obtained by Marking	<i>Liu Zhongmin Zhang Qingmao Guo Liang et al.</i>	0403011
• 050 FIBER OPTICS AND OPTICAL COMMUNICATIONS •		
Remote Frequency Up-Conversion of Radio over Fiber by Dispersion Compression of Short Pulse	<i>Wen He Chen Kuantong Zheng Xiaoping et al.</i>	0405001
Effects of Detector's Nonlinearity on Frequency Response of Visible Light Communication System	<i>Tang Danying Li Honglei Chen Xiongbai et al.</i>	0405002
Amplification of Dissipative Soliton and Supercontinuum Generation	<i>Zhang Juhui Hu Minglie Liu Bowen et al.</i>	0405003
Study of a Quasi-Distributed Optical Fiber Sensing System Based on Ultra-Weak Fiber Bragg Gratings	<i>Zhang Caixia Zhang Zhenwei Zheng Wanfu et al.</i>	0405004
Polarization-Selective and Wide-Angle Photodetector Based on Resonant Waveguide Grating	<i>Hu Jinhua Huang Yongqing Duan Xiaofeng et al.</i>	0405005
• 060 MATERIALS •		
Light Transmission Properties of One-Dimensional Sinc Function Photonic Crystals Containing a Dispersive Defect Layer with Negative Refractive Index	<i>Wang Yun Liu Dan Liu Yong et al.</i>	0406001
• 080 MEASUREMENT AND METROLOGY •		
Study on the Camera Stations' Optimization of Stereoscope System Based on Plane Intersection Model	<i>Wang Wei Yu Zhijing Guo Yin et al.</i>	0408001
Fast Phase Retrieval for Annular Pupil Using Spot Image	<i>Chen Xinhua Shen Weimin</i>	0408002
Study on Large Convex Aspherical Lens Testing	<i>Song Qiang Yang Baoxi Yuan Qiao et al.</i>	0408003
Environment Compensation Technologies in Dual-Frequency Laser Interferometer Measurement System	<i>Chi Feng Zhu Yu Zhang Zhiping et al.</i>	0408004
Analysis of Non-Fourier Effect During Laser-Induced Radiation of Micro Scale Carbon Particulates	<i>Chen Linghong Zuo Lei Wu Jian et al.</i>	0408005
• 090 HOLOGRAPHY AND INFORMATION PROCESSING •		
Study of Image Quality Degraded by Los Jitter	<i>Wang Wanting Guo Jin Jiang Zhenhua et al.</i>	0409001
Three-Dimensional Visualization of the Micro-Structure and Mechanism of Magnetorheological Fluids Using Digital Micro-Holography	<i>Wang Qiukuan Yang Hong Li Guangyong et al.</i>	0409002
A Resolution Enhancement Method Based on Interpolation and Extrapolation in Digital Holography	<i>Xia Haoguang Zhang Jiachen Ji Xiaoli et al.</i>	0409003
Theoretical and Experimental Study on Digital Phase-Shifting Holography Based on Circular Polarized Light Interference	<i>Zhu Zhuqing Li Yang Feng Shaotong et al.</i>	0409004
• 110 TERAHERTZ TECHNOLOGY •		
Tunable Continuous-Wave Terahertz Radiation System Based on Photomixing	<i>Shi Tonglu Liu Jianjun Hong Zhi</i>	0411001
• 130 ATMOSPHERIC AND OCEANIC OPTICS •		
Propagation Performance of Supercontinuum Source in Non-Kolmogorov Turbulence	<i>Sun Haiyue Wu Wuming Jin Aijun et al.</i>	0413001
• 140 REMOTE SENSING AND SENSORS •		
Analysis and Sorting of Impacts of Measurement Errors on Positioning Accuracy of Laser Point Cloud Obtained from Airborne Laser Scanning	<i>Wang Jianjun Liu Jidong</i>	0414001
• 150 SPECTROSCOPY •		
Optimization of Light Frequency Shift Characteristics for Coherent Population Trapping Atomic Clock	<i>Zhang Yan Zhang Yi Yin Yi et al.</i>	0415001
Design and Experimental Analysis of New Photoacoustic Cell	<i>Zheng Dezhong Zhao Nan</i>	0415002
Dual-Pulse Laser-Induced Breakdown Spectroscopy of Al Element in AlCl ₃ Aqueous and Mixed Compound Solutions	<i>Wang Li Xu Li Zhou Yu et al.</i>	0415003
Study of the Relevance between Different Grain Sizes of 12Cr1MoV and Characteristics of Laser Induced Breakdown Spectroscopy	<i>Dai Yuan Dong Xuan Zhong Wanli et al.</i>	0415004
• 160 OPTICAL DESIGN AND FABRICATION •		
A Method to Measure Off-Axis Fabrication and Off-Axis Angle of Axis Aspheric Mirror Precisely	<i>Zhang Xuemin Wei Ruiyi Yu Tao et al.</i>	0416001
Zoom Optical System Design Based on Matlab	<i>Gao Duorui Zhong LiuJun Zhao Zhao et al.</i>	0416002
Optical Design of Lithography Projective Lens with Variable Total Track	<i>Cai Yanmin Wang Xiangzhao Huang Huijie</i>	0416003
• 180 QUANTUM OPTICS •		
Experimental Demonstration of Intracavity Double Resonance for 9.2 GHz Frequency Difference Light and Its Spatial Separation	<i>Ma Rong Li Yuan Feng Jingliang et al.</i>	0418001