

LP 中国激光杂志社
CHINESE LASER PRESS

10
2009
2019

QK1923910

中国激光

Chinese Journal of Lasers

[总第508期]



第46卷 | 第4期

Vol. 46 | No. 4

2019.4



ISSN 0258-7025



9 770258 702193

万方数据

中国科学院上海光学精密机械研究所 主办
中国光学学会

中国激光

第 46 卷 第 4 期 2019 年 4 月

(总第 508 期)

目 次

• 激光器件与激光物理 •

大范围可调谐液晶/聚合物光栅有机半导体激光器	刘丽娟, 孔晓波, 刘彦庆, 等	0401001
小型化可调谐外腔面发射绿光激光器	邱小浪, 陈雪花, 朱仁江, 等	0401002
氙灯抽运 Er:YAP 晶体的中红外激光性能	权聪, 孙敦陆, 罗建乔, 等	0401003
低噪声连续单频 532 nm/1.06 μm 双波长激光器	高英豪, 李渊骥, 冯晋霞, 等	0401005

• 激光制造 •

单晶金刚石飞秒激光加工的烧蚀阈值实验	陈根余, 朱智超, 殷赓, 等	0402001
脉冲激光与脉冲 GMAW 复合焊接的动态交互行为	张旺, 孟威, 郭彦兵, 等	0402002
6016 和 5182 铝合金激光焊接接头的组织与结构	黄毅, 黄坚, 聂璞林	0402003
非熔透激光搭接焊 SUS304 奥氏体不锈钢无焊缝侧变形机理	刘恩泽, 姚成武, 谢雨凌, 等	0402004
10Ni5CrMoV 钢真空激光焊接焊缝的组织与性能	王继明, 李俐群, 彭根琛, 等	0402005
铜-铝异种箔片纳秒激光扫描点焊成形及组织特征	吴希, 张培磊, 唐满, 等	0402006
基于机器视觉的铝合金激光清洗实时检测系统	史天意, 周龙早, 王春明, 等	0402007
纳秒激光熔覆硅纳米薄膜的仿真分析及实验研究	徐龙, 洪捐, 汪炜, 等	0402008
微锻造激光熔覆沉积高性能 TC4 组织与各向异性	张金智, 张安峰, 王宏, 等	0402009
基于环形聚焦技术的小口径管件内壁的激光重熔	俞照辉, 文忠, 李玮, 等	0402010
低热输入脉冲激光修复高温合金液化裂纹研究	赖境, 路媛媛, 张航, 等	0402011

• 材料与薄膜 •

激光诱导融石英释放微粒的传播研究	彭舸, 卢礼华, 董喆	0403001
退火温度对铝掺杂氧化锌薄膜晶体质量及光电性能的影响	郭德双, 陈子男, 王登魁, 等	0403002

• 测量与计量 •

蓝宝石晶片中微/纳米缺陷散射特性的仿真	程洁, 王湘宁, 肖永亮, 等	0404001
脉冲染料激光的线宽压缩与测量 (封面文章)	张乔枫, 谢锦林, 范费彬, 等	0404002
基于 XGBoost 的机载激光雷达与高光谱影像结合的特征选择算法	张爱武, 董喆, 康孝岩	0404003

臭氧激光雷达硬件故障数据的识别方法	郑朝阳, 张天舒, 范广强, 等	0404004
基于自准直仪的测角传感器实时在位校准方法	张文颖, 朱浩然, 李美莹, 等	0404005
基于典型相关分析的点云配准算法	唐志荣, 刘明哲, 蒋悦, 等	0404006
基于稀疏矩阵的光学元件表面疵病检测	陈晨, 王红军, 王大森, 等	0404007
基于声光效应的海水声速测量	薛彬, 王志洋, 张凯, 等	0404008
融合改进场力和判定准则的点云特征规则化	刘庆, 章光, 陈西江	0404009
基于空间载频干涉的薄片激光晶体热畸变测量	张元昊, 朱广志, 高佳鹏, 等	0404010
双波长动态液膜厚度与温度同步测量系统	杨荟楠, 邓豪, 蒋永, 等	0404011
基于利特罗式激光反馈光栅干涉的微位移测量技术	孔令雯, 蔡文魁, 施立恒, 等	0404012
基于深度学习的车位智能检测方法	徐乐先, 陈西江, 班亚, 等	0404013
· 光束传输与控制 ·		
气溶胶粒子微观特性对后向散射回波的影响	陈鹏, 赵继广, 宋一铄, 等	0405001
环形阵列艾里涡旋光束的自聚焦特性	赖松陶, 兰燕平, 毛红行, 等	0405002
噪声情况下模型式无波前探测自适应光学系统扩展目标成像校正	马良, 徐奇, 吴阳, 等	0405003
· 光纤光学与光通信 ·		
基于位置和功率协同优化的煤矿工作面可见光通信光源分布	游春霞, 胡青松, 李世党, 等	0406001
基于恒幅零自相关序列的相干光正交频分复用系统定时同步算法	许彦朋, 刘剑飞, 曾祥烨, 等	0406002
· 生物医学光子学与激光医学 ·		
光片荧光显微镜长时间的稳定成像	张球, 梁东, 白丽华, 等	0407001
· 遥感与传感器 ·		
分布式光纤传感器应变传递规律研究	章征林, 高磊, 孙阳阳, 等	0410001
相干光时域反射计的光频扫描扩展检测	宋牟平, 吴斌, 朱伟基, 等	0410002
· 光谱学 ·		
扩散火焰中燃料种类对碳烟演变过程的影响	吴建, 陈玲红, 周剑武, 等	0411001
· 量子光学 ·		
基于指示单光子源和量子存储的量子密钥分配	何业锋, 王登, 杨红娟, 等	0412001



本刊电子版彩色效果请详见中国光学期刊网 www.opticsjournal.net

Chinese Journal of Lasers

Vol.46, No.4 (Series No.508) April 2019

CONTENTS

• Laser Devices and Laser Physics •

Broadband Tunable Organic Semiconductor Laser Based on Liquid Crystal/Polymer Grating

..... Liu Lijuan, Kong Xiaobo, Liu Yanqing, et al. 0401001

Compact Tunable External-Cavity Surface-Emitting Green Laser Qiu Xiaolang, Chen Xuehua, Zhu Renjiang, et al. 0401002

Mid-Infrared Laser Performances of Er:YAP Crystals Pumped by Xenon Lamp

..... Quan Cong, Sun Dunlu, Luo Jianqiao, et al. 0401003

Low Noise Continuous-Wave Single-Frequency Dual-Wavelength Laser Operating at 532 nm and 1.06 μm

..... Gao Yinghao, Li Yuanji, Feng Jinxia, et al. 0401005

• Laser Manufacturing •

Experiment on Ablation Threshold of Single Crystal Diamond Produced by Femtosecond Laser Processing

..... Chen Genyu, Zhu Zhichao, Yin Jiu, et al. 0402001

Dynamic Interaction Behavior of Pulse GMAW + Pulse Laser Hybrid Welding Zhang Wang, Meng Wei, Guo Yanbing, et al. 0402002

Microstructures and Textures of 6016 and 5182 Aluminum Laser Welded Joints Huang Yi, Huang Jian, Nie Pulin 0402003

Deformation Mechanism of SUS304 Austenitic Stainless Steel at Weldless Side in Partial Penetration Laser Welding

..... Liu Enze, Yao Chengwu, Xie Yuling, et al. 0402004

Microstructures and Properties of Weld Bead of 10Ni5CrMoV Steel Obtained with Laser Welding at Vacuum

..... Wang Jiming, Li Liqun, Peng Genchen, et al. 0402005

Formation and Microstructure Characteristics in Spot Welding of Dissimilar Cu-Al Foil by Nanosecond Laser Scanning

..... Wu Xi, Zhang Peilei, Tang Man, et al. 0402006

Machine Vision-Based Real-Time Monitor System for Laser Cleaning Aluminum Alloy

..... Shi Tianyi, Zhou Longzao, Wang Chunming, et al. 0402007

Simulation Analysis and Experimental Study on Nanosecond Laser Cladding Silicon Nano Film

..... Xu Long, Hong Juan, Wang Wei 0402008

Microstructure and Anisotropy of High Performance TC4 Obtained by Micro Forging Laser Cladding Deposition

..... Zhang Jinzhi, Zhang Anfeng, Wang Hong, et al. 0402009

Laser Remelting for Inner Face of Small-Bore Tube Based on Ring Focusing Yu Zhaohui, Wen Zhong, Li Wei, et al. 0402010

Liquation Cracks in Superalloys Repaired by Low-Heat Input Pulsed Laser Lai Jing, Lu Yuanyuan, Zhang Hang, et al. 0402011

• Materials and Thin Films •

Propagation of Laser-Induced Particles From Fused Silica Peng Ge, Lu Lihua, Dong Zhe 0403001

Effects of Annealing Temperature on Crystal Quality and Photoelectric Properties of Al-Doped ZnO Thin Film

..... Guo Deshuang, Chen Zinan, Wang Dengkui, et al. 0403002

• Measurement and Metrology •

Simulation of Scattering Characteristics of Micro- and Nano-Scale Defects in Sapphire Wafer

..... Cheng Jie, Wang Xiangning, Xiao Yongliang, et al. 0404001

Linewidth Narrowing and Measurement of Pulsed Dye Laser (Cover Paper)	Zhang Qiaofeng, Xie Jinlin, Fan Feibin, et al. 0404002
Feature Selection Algorithms of Airborne LiDAR Combined with Hyperspectral Images Based on XGBoost	Zhang Aiwu, Dong Zhe, Kang Xiaoyan 0404003
Identification Method of Ozone Lidar Hardware Failure Data	Zheng Zhaoyang, Zhang Tianshu, Fan Guangqiang, et al. 0404004
Real-Time In-Situ Calibration for Angle Measuring Sensor Based on Autocollimator	Zhang Wenying, Zhu Haoran, Li Meixuan, et al. 0404005
Point Cloud Registration Algorithm Based on Canonical Correlation Analysis	Tang Zhirong, Liu Mingzhe, Jiang Yue, et al. 0404006
Surface Defect Detection of Optical Components Based on Sparse Matrix	Chen Chen, Wang Hongjun, Wang Dasen, et al. 0404007
Seawater Sound Velocity Measurement Based on Acousto-Optic Effect	Xue Bin, Wang Zhiyang, Zhang Kai, et al. 0404008
Point Cloud Feature Regularization Based on Fusion of Improved Field Force and Judging Criterion	Liu Qing, Zhang Guang, Chen Xijiang 0404009
Thermo-Optical Aberration Measurement of Thin-Disk Laser Crystal Based on Spatial Carrier Interferometry	Zhang Yuanhao, Zhu Guangzhi, Gao Jiapeng, et al. 0404010
Simultaneous Measurement System of Thickness and Temperature of Two-Wavelength Dynamic Liquid Film	Yang Huinan, Deng Hao, Jiang Yong, et al. 0404011
Micro-Displacement Measurement Technology Based on Littrow-Configured Laser Feedback Grating Interference	Kong Lingwen, Cai Wenkui, Shi Liheng, et al. 0404012
Method for Intelligent Detection of Parking Spaces Based on Deep Learning	Xu Lexian, Chen Xijiang, Ban Ya, et al. 0404013
• Beam Transmission and Control •	
Influence of Microscopic Characteristics of Aerosol Particles on Backscattering Echo	Chen Peng, Zhao Jiguang, Song Yishuo, et al. 0405001
Self-Focusing Characteristics of Circular Array Airy Vortex Beams	Lai Songtao, Lan Yanping, Mao Hongxing, et al. 0405002
Extended Object Imaging Correction for Model-Based Wavefront Sensorless Adaptive Optics System Under Noise	Ma Liang, Xu Qi, Wu Yang, et al. 0405003
• Fiber Optics and Optical Communications •	
Light Source Distribution for Visible Light Communication in Coal Mine Working Face Based on Position and Power Co-Optimization	You Chunxia, Hu Qingsong, Li Shidang, et al. 0406001
Timing Synchronization Algorithm of Coherent Optical Orthogonal Frequency Division Multiplexing System Based on Constant Amplitude Zero Auto-Correlation Sequences	Xu Yanpeng, Liu Jianfei, Zeng Xiangye, et al. 0406002
• Biomedical Photonics and Laser Medicine •	
Long-Time Stabilization Imaging by Light Sheet Fluorescent Microscope	Zhang Qiu, Liang Dong, Bai Lihua, et al. 0407001
• Remote Sensing and Sensor •	
Strain Transfer Law of Distributed Optical Fiber Sensor	Zhang Zhenglin, Gao Lei, Sun Yangyang, et al. 0410001
Optical Frequency Scanning Extension Detection of Coherent Optical Time Domain Reflectometry	Song Muping, Wu Ying, Zhu Weiwei, et al. 0410002
• Spectroscopy •	
Effects of Fuel Types on Soot Evolution in Diffusion Flames	Wu Jian, Chen Linghong, Zhou Jianwu, et al. 0411001
• Quantum Optics •	
Quantum Key Distribution Based on Heralded Single Photon Sources and Quantum Memory	He Yefeng, Wang Deng, Yang Hongjuan, et al. 0412001



August 6-9



Xi'an, China

CIOP 2019

The 11th International Conference on Information Optics and Photonics

Plenary Talks



Hongxing Xu

Wuhan University, China



Frank Effenberger

Futurewei Technologies, USA



Fumio Koyama

Tokyo Institute of Technology, Japan



Philip Russell

Max Planck Institute for the Science of Light, Germany

Conference Chairs:

Shining Zhu, Nanjing University, China

Dieter Bimberg, CIOMP, CAS, China & TU Berlin, Germany

Technical Program Chairs:

Jianlin Zhao, Northwestern Polytechnical University, China

Yidong Huang, Tsinghua University, China

Shigehisa Arai, Tokyo Institute of Technology, Japan

Subcommittees

SC1. Light-Matter Interactions

SC2. Plasmonics and Metamaterials

SC3. Ultrafast and Nonlinear Phenomena

SC4. Solid State, Fiber, and Other Laser Sources

SC5. Silicon Photonics

SC6. Microwave Photonics

SC7. Micro and Nanophotonics

SC8. Optical Materials

SC9. Optical Measurement and Metrology

SC10. Infrared and Terahertz Technologies

SC11. Optical Imaging, Display, and Storage

SC12. Optical Communications and Networks

SC13. Optical Fiber and Waveguide Technologies

SC14. Biophotonics and Optofluidics

SC15. Optical Sensors and Systems

SC16. Atomic Physics, Quantum Photonics, and Quantum Information

Hosts



Technical Cosponsor

SPIE. DIGITAL LIBRARY

<http://ciop2019.htcis.net>

万方数据

Contact Us

Email: ciop@siom.ac.cn

Tel: 86-21-69918426

