

目次

综述与评论

- 激光制备带热障涂层高温合金微孔工艺研究 孙建林 孙会来 岳端木等(1259)
- 非分光红外气体传感器研究进展 张清 周李兵 贺耀宣等(1272)
- 构建反制激光红外制导武器的陆域防御体系思考 李朝龙 林德群 赵寒(1279)

激光应用技术

- 高压输电线路异物激光清除三维仿真研究 刘雷 刘霞 单宁(1286)
- 基于 ANSYS 的激光除漆技术数值模拟研究 邵壮 王涛(1294)
- 准球面模式下三种激光波长冰云大气反射率特性 任神河 高明 李艳等(1300)
- 基于激光点云坐标系的 3D 多目标跟踪算法研究 顾立鹏 孙韶媛 刘训华等(1307)
- 海洋水气界面对光学成像探测影响的研究 钟一鸣 张达(1314)

激光器技术

- 基于微型压缩机的高精度紫外激光器温控研究 熊伟国 朱元成(1321)
- 一种可提高谐振腔稳定性的结构设计 陈南亦 窦飞飞 张丽敏(1327)

红外技术及应用

- 基于双 DMD 的红外场景投影仪光学系统设计 郑雅卫 胡煜 郭云强等(1330)
- 靶标系统中的目标红外特性建模技术研究 杨翔云 吕勇 刘洋等(1336)
- 基于 SSD 框架的红外弱小目标检测技术研究 马玉莹 黄成章 黄静颖等(1342)
- PECVD 法制备 SiO₂ 膜均匀性研究 龙长林 吴限 陈国钦等(1348)

光电技术及系统

- 基于奇异值分解的光电跟踪系统标定方法 宋亚 樊芮锋 李辉强(1352)

光纤传感及光通讯技术

- 基于 RSSI 加权质心的光纤光栅传感网络冲击定位 江虹 刘鹏辉 郑晓丹等(1357)
- 基于类脑脉冲神经网络的光纤油气管道监测 宋艳丽(1364)

光学技术

- 基于组合线结构光的涂胶质量检测系统设计 王一 李龙飞 陆坤龙(1371)
- 激光通信终端光学系统杂散光抑制技术研究 赵迎 接长伟(1378)

图像与信号处理

- 光纤 F-P 腔干涉双路信号解包裹相位恢复 赵付 刘径舟(1383)
- 基于生物启发模型的红外小目标检测 李斌 李秀红 艾斯卡尔·艾木都拉(1388)
- 基于 KCF 算法的空中目标跟踪模拟 柳天宇 王克强(1396)

LASER & INFRARED

(Monthly, Publication Started in 1971)

Vol. 51 No. 10

(Series No. 517)

October 2021

JOINT JOURNAL of
China Optics & Opto-Electronics
Manufactures Association
Laser & Infrared Technology Information
Exchange Organization, CEI
Quantum Electronics & Opto-
Electronics Society, CIE

CONTENTS

Laser Application Technology

- (1259) Research on laser machining of micro-holes in superalloy with thermal barrier coating *SUN Jian-lin et al*
(1272) Research progress of NDIR optical gas sensor *ZHANG Qing et al*
(1279) Land defense system based on anti laser infrared guided weapon *LI Chao-long et al*

Laser Application Technology

- (1286) Three-dimensional simulation of laser removal of foreign body in high voltage transmission line *LIU Lei et al*
(1294) Numerical simulation of laser paint removal technology based on ANSYS *SHAO Zhuang et al*
(1300) Reflectivity characteristics of ice cloud atmosphere with three laser wavelengths in quasi-spherical mode
..... *REN Shen-he et al*
(1307) 3D multi-object tracking algorithm based on laser point cloud coordinate system *GU Li-peng et al*
(1314) Research of the influence of sea surface of air and water to the optical imaging detection *ZHONG Yi-ming et al*

Laser Technology

- (1321) Research on high precision temperature control of ultraviolet laser based on micro compressor *XIONG Wei-guo et al*
(1327) Optimal design of improving the stability of resonator *CHEN Nan-yi et al*

Infrared Technology & Application

- (1330) Design of optical systems for infrared scene projector based on dual-DMD *ZHENG Ya-wei et al*
(1336) Research on target infrared characteristic modeling technology in target system *YANG Xiang-yun et al*
(1342) Research of infrared dim and small targets detection technology based on SSD framework *MA Yu-ying et al*
(1348) Research of thickness uniformity of SiO₂ deposited by PECVD *LONG Chang-lin et al*

O - E Technology & System

- (1352) Calibration method of electro-optical tracking system based on singular value decomposition *SONG Ya et al*

Optical Fiber Sensing & Optical Communication

- (1357) Impact localization of FBG sensor networks based on RSSI weighted centroid *JIANG Hong et al*
(1364) Fiber sensor pipeline monitoring based on brain spiking neural network *SONG Yan-li*

Optical Technology

- (1371) Design of glue quality inspection system based on combined line structured light *WANG Yi et al*
(1378) Research on stray light suppression technology of optical system of laser communication terminal *ZHAO Ying et al*

Image & Signal Processing

- (1383) Phase unwrapping recovery of two micro-vibration signals in fiber F-P cavity interference *ZHAO Cun et al*
(1388) Infrared small target detection via bio-inspired model *LI Bin et al*
(1396) Air target tracking simulation based on KCF algorithm *LIU Tian-yu et al*