

目次

综述与评论

- 无铅钙钛矿光电子器件研究进展 曾文博 冯琳 李国辉等(627)
- 高工作温度碲镉汞红外探测器研究进展 宋淑芳 黄来玉 田震(636)

激光应用技术

- 飞秒激光加工快速测高随动方法研究 盛渤轩 侯煜 张帆等(641)
- 激光清洗 7075 铝合金轮胎模具表面质量优化分析 王涛 张译之 苗润芃(646)
- 基于改进型 B 样条分层插值的汽车零部件检测研究 宋艳芳 徐颖若 张继方(653)
- 激光烧蚀平面碳靶的等离子体形态演化 张兴强 马真艳(659)
- 纳秒激光微织构 TC4 表面的抗结冰能力 刘玲 崔静 杨广峰(665)
- 基于三维激光成像技术的扣件缺损自动检测 李明森 李林 张超等(670)
- 部分相干径向偏振涡旋光焦场轨道角动量特性 贺蕊 吕宏 闫丽凝等(678)
- 基于 QCL 吸收光谱的 SO_2 , SO_3 同步测量技术 俞峰苹 李济东 彭志敏等(686)
- 基于激光自混合干涉调频信号的位移测量实验 韩玉祥 丛至诚 高丙坤等(695)

激光器技术

- 双波长可切换方波类噪声锁模线形光纤激光器 耿旭 汪徐德 潘婕好等(700)

红外技术及应用

- 进气压力及流量对自调型 J-T 制冷器性能的影响 苏鹏翼 赵利明 徐长彬(706)
- 红外序列图像的主成分分析算法研究 董毅旺 朱笑 洪康等(714)
- 红外热成像技术在 ADAS 系统中的应用 钟明霞 姜柏军(721)

红外材料与器件

- MEE 生长参数对复合衬底材料质量的影响 李震 高达 王丛等(726)
- 碲锌镉晶体 Cd 源控制生长技术研究 刘江高 李轩 徐强强等(730)

光纤传感及光通讯技术

- 改进 PSO-SVM 的光纤传感网络数据识别系统 马莉莉 高静 申志军等(734)
- 萨格纳克干涉仪级联的高灵敏度温度传感器 申万梅 江超 郭小珊等(740)

光电对抗

- 舰载激光武器对典型无人机蜂群目标毁伤距离研究 杨剑波 宗思光 陈利斐(745)

电子电路

- 一种大间距短波线列红外探测器读出电路的设计 王海先 岳冬青 袁媛等(752)

图像与信号处理

- 无人机载激光雷达人工林单木分割算法研究 于海洋 冯思伟 申洋洋等(757)
- 改进贪婪投影三角化算法的激光点云快速三维重建 刘翔宇 王健 常清法等(763)
- 从图像到图像的场重建技术研究 冉建国 刘珩 杨鑫(771)
- 一种纹理与结构光叠加的立体视觉改进算法 刘博存 常思杰 林浩田等(776)

LASER & INFRARED

(Monthly, Publication Started in 1971)

Vol. 52 No. 5

(Series No. 524)

May 2022

JOINT JOURNAL of

China Optics & Opto-Electronics

Manufactures Association

Laser & Infrared Technology Information

Exchange Organization, CEI

Quantum Electronics & Opto-

Electronics Society, CIE

CONTENTS

Overview & Comment

- (627) Research progress on lead-free perovskite optoelectronic devices ZENG Wen-bo *et al*
(636) The theory and research advancement of HgCdTe detectors at high operating temperature SONG Shu-fang *et al*

Laser Application Technology

- (641) Research on confocal altimetry cascade control in high-speed femtosecond laser processing SHENG Bo-xuan *et al*
(646) Optimization analysis of surface quality of laser-cleaned 7075 aluminium alloy tire mould WANG Tao *et al*
(653) Research on auto parts inspection based on improved B-spline hierarchical interpolation SONG Yan-fang *et al*
(659) Outline evolution of plasma from planar carbon target ablated by laser ZHANG Xing-qiang *et al*
(665) Anti-icing ability of nanosecond laser micro-textured TC4 surface LIU Ling *et al*
(670) Automatic detection of fastener defects based on 3D laser imaging technology LI Ming-sen *et al*
(678) Orbital angular momentum properties of focal field for partially coherent radially polarized vortex beam HE Rui *et al*
(686) Simultaneous measurements of SO₂ and SO₃ based on QCL absorption spectroscopy YU Feng-ping *et al*
(695) Displacement measurement experiment based on laser self-mixing interference frequency modulation signal HAN Yu-xiang *et al*

Laser Technology

- (700) Switchable dual-wavelength square noise-like pulse in a linear-cavity fiber laser GENG Xu *et al*

Infrared Technology & Application

- (706) Influence of inlet pressure and flow rate on the performance of self-adjusting J-T cryocooler SU Peng-yi *et al*
(714) Research on principal component analysis algorithm for infrared image sequence DONG Yi-wang *et al*
(721) Application of infrared thermal imaging technology in ADAS system ZHONG Ming-xia *et al*

Infrared Material & Device

- (726) The influence of MEE growth parameters on the quality of composite substrate materials LI Zhen *et al*
(730) Study on the growth technology of CdZnTe crystal with Cd reservoir controlled LIU Jiang-gao *et al*

Optical Fiber Sensing & Optical Communication

- (734) Optical fiber sensor network data recognition system based on PSO-SVM MA Li-li *et al*
(740) High sensitivity temperature sensors based on Sagnac interferometers cascading SHEN Wan-mei *et al*

O - E Countermeasure

- (745) Research on destruction distance of shipborne laser weapon to typical UAV swarm target YANG Jian-bo *et al*

Electronic Circuit

- (752) The design of ROIC suitable for large-spacing short-wave line infrared detector WANG Hai-xian *et al*

Image & Signal Processing

- (757) Research on single tree segmentation algorithm of UAV LiDAR plantation YU Hai-yang *et al*
(763) Fast 3D reconstruction of point cloud based on improved greedy projection triangulation algorithm LIU Xiang-yu *et al*
(771) Research on digital camouflage scheme based on pix2pix RAN Jian-guo *et al*
(776) An improved stereo vision algorithm to solve the superposition of texture and structure light LIU Buo-cun *et al*