

目次

综述与评论

激光全息技术在现代展览展示中的应用 刘 泉 杨洪鑫 林洪沂等(787)

超声激励热成像探测材料微缺陷的研究进展 贾 宇 王承强 梁嘉辉等(796)

激光应用技术

激光清洗 5083 铝合金表面漆层的数值模拟与试验研究 万 磊 王裕光 左小艳等(803)

基于改进蝙蝠算法的激光供能无人机 MPPT 技术 袁建华 王 林 赵子玮等(814)

一种毫米波雷达机场跑道异物检测算法 汤双霞(820)

飞秒激光刻蚀 CF/EP 表面疏水性能研究 陈苗苗 张大斌 文梦蝶等(827)

基于改进 RPN 的车载导航目标识别技术 史俊莉(833)

基于复耦合模型的面齿轮飞秒激光加工参数影响研究 明兴祖 赖名涛 明 瑞等(838)

离焦量对铝合金表面激光除漆损伤特性的影响 杨文锋 付婵媛 钱自然等(849)

红外材料与器件

红外探测器封装结构电学框架设计方法 马 静 袁羽辉 徐长彬(856)

红外焦平面探测器键合和剪切可靠性试验研究 刘若冰 王 爽 陈 勤等(861)

光纤传感及光通讯技术

基于 FBG 的悬臂梁式微力与微位移传感单元 彭星玲 茶映鹏 叶建雄等(870)

基于子波变换的无线通信网络干扰信号检测研究 王晓惠 冯彩英(875)

变形矩形和 V 形微屏蔽线传输特性的矢量有限元计算 孙 海(881)

光电对抗

激光武器反无人机集群建模与效能评估 吴 玲 卢俊霖 许俊飞(887)

军用红外车载驾仪人机功效分析 王红培(893)

光学技术

一种用于激光雷达的微振镜设计 陆 英(900)

超宽波段透射式中继镜头设计 范 翔 赵 森(905)

变 F 数红外光学设计方法 王嘉晨 李江勇(909)

电子电路

CTIA 线列型读出电路输出异常问题研究 王 静 刘兴新 李冬冰等(914)

基于小信号的电光调制器半波电压测量方法 闫应星 李森森 胡红坤等(918)

图像与信号处理

基于深度卷积网络的 3D 人脸重构算法 陈 娜(923)

基于改进细菌觅食优化算法的遥感图像增强研究 于 敏(931)

恐龙谷南缘山区 DIM 点云的 PTD 滤波改进试验研究 罗为东 甘 淑 袁希平等(938)

LASER & INFRARED

(Monthly, Publication Started in 1971)

Vol. 52 No. 6

(Series No. 525)

June 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

- (787) Application of laser holographic technology in modern exhibitions and shows *LIU Xiao et al*
(796) Research progress of ultrasonic excitation thermography for detecting material microdefects *JIA Yu et al*

Laser Application Technology

- (803) Numerical simulation and experimental study on laser cleaning of 5083 aluminum alloy surface paint layer
..... *WAN Lei et al*
(814) MPPT technology of laser powered UAV based on improved bat algorithm *YUAN Jian-hua et al*
(820) A novel FOD detection method for millimeter-wave radar *TANG Shuang-xia*
(827) Study on hydrophobic properties of CF/EP surface etching by femtosecond laser *CHEN Miao-miao et al*
(833) Target recognition technology for vehicle navigation based on improved RPN *SHI Jun-li*
(838) Research on influence of femtosecond laser processing parameters of face gear based on complex coupling
model *MING Xing-zu et al*
(849) Effect of defocus on damage characteristics of laser paint removal on aluminum alloy surface *YANG Wen-feng et al*

Infrared Material & Device

- (856) Design of electrical frame in package of infrared detectors *MA Jing et al*
(861) Study on bonding and shear reliability test of infrared focal plane detector *LIU Ruo-bing et al*

Optical Fiber Sensing & Optical Communication

- (870) Cantilever beam type micro-force and micro-displacement sensing unit based on fiber Bragg grating
..... *PENG Xing-ling et al*
(875) Research on interference signal detection based on wavelet transform in wireless communication network
..... *WANG Xiao-hui et al*
(881) Calculation of the transmission characteristics in deformed rectangular-shaped and V-shaped microshield lines
by edge-based FEM *SUN Hai*

O - E Countermeasure

- (887) Modeling and effectiveness evaluation on UAV cluster interception using laser weapon systems *WU Ling et al*
(893) Man-machine efficacy analysis of military infrared vehicle driver *WANG Hong-pei*

Optical Technology

- (900) A design of micro scanning mirror based on laser radar system *LU Ying*
(905) Design of super-wide band transmission relay lens *FAN Xiang et al*
(909) Infrared optical design method of variable F number *WANG Jia-chen et al*

Electronic Circuit

- (914) Study on output abnormality of CTIA linear readout circuit *WANG Jing et al*
(918) A method of measuring half wave voltage of electro-optic modulator based on small signal *YAN Ying-xing et al*

Image & Signal Processing

- (923) 3D face reconstruction algorithm based on deep convolutional networks *CHEN Na*
(931) Study on remote sensing image enhancement based on improved bacterial foraging algorithm *YU Min*
(938) Experimental study on the improvement of PTD filtering for dense point clouds of UAV in the southern margin of
dinosaur valley *LUO Wei-dong et al*