

目 次

• 激光材料和光学元件•

- 硅基光栅耦合封装结构的优化设计 宋曼谷 曹立强 刘丰满等(479)
结合高位深相位光栅图的 LC-SLM 标定 徐 豪 张运海 张 欣等(515)
Rochon 棱镜反向使用消光比 马丽丽 吴福全 宋连科等(611)

• 激光物理与激光器件•

- 空间均匀和非均匀场下 H_2^+ 辐射谐波的空间分布 冯立强 刘 航 刘 辉(467)
一种声光调 Q 窄脉宽小体积激光器 刘建强 汪 楠 杨盈莹等(562)
高功率轴快流 CO_2 激光器激励源热沉结构优化设计 赵 恒 李 波 胡友友等(566)
偏置信号和噪声对单模激光随机共振的影响 叶 庆(602)

• 激光与光电子技术应用•

- 双波长粉末倍频检测系统研究 林长浪 李昌立 王 新等(463)
电激励准分子激光系统的电磁辐射和抑制 赵读亮 梁 劍 方晓东(484)
同步荧光结合神经网络同时测定 3 种抗生素 庄 宇 马超群 王小晗等(489)
不同吸光涂层对激光微织构加工性能影响研究 华希俊 丁积霖 张培耘等(498)
应用 3 维同步荧光光谱测定胭脂红浓度 杜家蒙 陈国庆 马超群等(503)
一种激光三角测量的标定方法及误差分析 王振宇 李 烨 郁 丰等(521)
激光喷丸对 Ti-6Al-4V 钛合金中高温性能影响研究 杨 涛 周王凡 杨进德等(526)
基于激光位移传感器的 3 维位置测量算法研究 龙 龙 李宗峰(531)
激光输能光电池温度场数值模拟 李贝贝 李小将(537)
表面增强喇曼光谱研究脐橙中亚胺硫磷农药残留 刘燕德 谢庆华 王海阳等(545)
太赫兹衰减全内反射油品检测系统中的棱镜设计 张 杰 李 健 周 南等(549)
基于磁光波导的液体折射率传感特性研究 张艳芬 唐婷婷 李 杰(554)
改进根轨迹的快速反射镜控制参量设计 艾志伟 谭 毅 吴琼雁等(558)
基于修正灰色残差算法的风廓线质量控制 谢日华 何建军 胡 娟等(573)
基于正交实验的 SUS304 不锈钢激光打孔过程参量优化 钱晓忠 王琪琪 任乃飞(578)
激光表面微造型对摩擦学性能的影响 万 轶 熊党生 李建亮(586)
H13 钢表面激光熔覆层稀释率及强化效果研究 陈菊芳 陈国炎 孙凌燕等(596)

• 光通信与光信息技术•

- 基于傅里叶变换相位的散斑面内位移量算法 荣文秀 钱晓凡 刘 滨等(473)
VirtualLab Fusion 对 SNOM 光纤探针外部光场分布的仿真 张宝武 饶鹏辉 霍剑锋等(494)
基于波段指数的高光谱影像波段选择算法 龚文娟 董安国 韩 雪(507)
基于亚像素定位技术的激光光斑中心位置测量 孙立环 赵霄洋 高凌好等(511)
星上光电振荡器的微波信号产生与转发研究 邹广健 张宝富 滕义超等(582)
复合结构光子晶体耦合腔波导慢光特性研究 刘文楷 孙 耀 董小伟(591)

CONTENTS

Study on dual wavelength powder frequency doubling detection system	..... LIN Zhanglang et al. (463)
Spatial distribution of H ₂ ⁺ radiation harmonics in spatial homogeneous and inhomogeneous fields	..... FENG Liqiang et al. (467)
Algorithm of in-plane displacement measured by speckle photography based on phase of Fourier transform	..... RONG Wenxiu et al. (473)
Optimized design of grating coupling packaging structure on silicon substrate	..... SONG Mangu et al. (479)
Electromagnetic radiation and inhibition of electric excitation excimer laser systems	..... ZHAO Duliang et al. (484)
Simultaneous determination of three antibiotics based on synchronous fluorescence combined with neural network	..... ZHUANG Yu et al. (489)
Simulation of external optical field of SNOM optical probe with VirtualLab Fusion	..... ZHANG Baowu et al. (494)
Influence of different light absorbing coating on property of laser surface texturing	..... HUA Xijun et al. (498)
Determination of carmine concentration with 3-D synchronous fluorescence spectrometry	..... DU Jiameng et al. (503)
Band selection algorithm for hyperspectral images based on band index	..... GONG Wenjuan et al. (507)
Measurement of laser spot center position based on sub pixel positioning technology	..... SUN Lihuan et al. (511)
Calibration of LC-SLM with high bit depth phase gratings	..... XU Hao et al. (515)
Calibration method and error analysis of laser triangulation measurement	..... WANG Zhenyu et al. (521)
Effect of laser shot peening on high temperature property of Ti-6Al-4V titanium alloy	..... YANG Tao et al. (526)
3-D position measurement algorithm based on laser displacement sensors	..... LONG Long et al. (531)
Numerical simulation of photovoltaic cell temperature field of laser power beaming	..... LI Beibei et al. (537)
Quantitative study on phosmet residues in navel oranges based on surface enhanced Raman spectra	..... LIU Yande et al. (545)
Prism design for oil detecting systems based on terahertz attenuated total internal reflection	..... ZHANG Jie et al. (549)
Highly sensitive refractive index sensor based on magneto-optical waveguide	..... ZHANG Yanfen et al. (554)
Design of control parameters for fast steering mirrors by improving root locus	..... AI Zhiwei et al. (558)
A micro acousto-optic Q-switched laser with narrow pulse width	..... LIU Jianqiang et al. (562)
Optimization design of microchannel heat sinks of excitation sources for high power fast axial flow CO ₂ lasers	..... ZHAO Heng et al. (566)
Wind profile quality control based on modified grey residual algorithm	..... XIE Rihua et al. (573)
Optimization of laser drilling processing parameters for SUS304 based on orthogonal experiments	..... QIAN Xiaozhong et al. (578)
Study on generation and distribution of microwave signals based on optoelectronic oscillator for satellite applications	..... ZOU Guangjian et al. (582)
Effect of laser surface micro-modeling on tribological properties	..... WAN Yi et al. (586)
Investigation on slow light in composite-structure photonic crystal coupled-cavity waveguide	..... LIU Wenkai et al. (591)
Investigation of dilution ratio and strengthening effect of laser cladded coating on H13 steel	..... CHEN Jufang et al. (596)

Influence of biased signal and noise on characteristics of stochastic resonance in single mode laser	.....	YE Qing (602)
PID control of optical axis stabilization for airborne laser communication based on fuzzy neural network	.....	LIU Shitao <i>et al.</i> (606)
Extinction ratios of reverse Rochon prisms	.....	MA Lili <i>et al.</i> (611)
Optimal design of crosstalk in $4 \times 10\text{Gbit/s}$ parallel optical modules	.....	YU Haiyang <i>et al.</i> (614)

(本期供稿编辑 赵颖彦)

本刊被以下数据库收录:

美国《化学文摘》CA 数据库;英国《科学文摘》INSPEC 数据库;美国《剑桥科学文摘:工程技术》数据库;俄罗斯《文摘杂志》AJ 数据库;日本科学技术振兴机构中国文献数据库;波兰《哥白尼索引》数据库;万方期刊群数据库;中国学术期刊(遴选)数据库;中国学术期刊(光盘版)、中国期刊网等