

第42卷 第2期
Vol.42 No.2

ISSN 1002-2082
CN 61-1171/O4
CODEN YGUA E4

应用光学

Journal of Applied Optics

CSCD收录 中文核心期刊 中国科技核心期刊

2

中国兵器工业第二〇五研究所 主办
中国兵工学会

2021年3月

目 次

光电系统与工程

- 菱形 HSLDS 隔振器负刚度机构质量及摩擦力影响分析
..... 袁屹杰, 纪 明, 张卫国, 伊兴国, 王 毅, 施道云 (207)
- 大型矩形准直镜柔性支撑系统的多目标优化设计和稳定性分析
..... 彭元镜, 许明明, 陈 忆, 胡中文, 季杭馨, 王 磊 (215)
- 高清针孔镜头光学系统设计 孙彦超, 罗 锐, 梁秀玲 (223)
- 一种工作于长波红外波段的 40 $\times$ 成像物镜设计
..... 李锦程, 谢洪波, 杨 磊, 陈 卉, 孙毅轩 (229)
- 光束斜入射的折反射组合光学系统的像差计算 赵小楠, 吕丽军 (236)
- 硅基光学相控阵性能评估方法 张耀元, 王 锐, 姜瑞韬, 杜坤阳, 李远洋 (242)
- 多基准轴透射式系统装调方法 杜国军, 王春雨, 欧宗耀, 王 聪, 胡 斌 (247)

光电信息获取与处理

- 基于 45 $^{\circ}$ 反射导光镜的圆孔内壁图像检测方法研究 史玳菲, 陈 欣, 陈继刚 (255)
- 基于离轴数字全息改善散斑自相关重建效果 李 聪, 徐 昭, 陈 洁, 倪 洋, 周 昕 (262)
- 基于卷积神经网络的蛋胚活性精准检测方法研究
..... 郭 盟, 董新明, 韩 广, 王慧泉, 王忠强, 赵 喆 (268)
- 批量高速二维码视觉检测识别系统 李建刚, 黄诗浩, 郑启强, 杨 鑫, 黄 靖, 周伯乐 (276)
- 基于加权块稀疏联合非凸低秩约束的高光谱图像去条带方法 袁宇丽, 吕俊瑞, 罗学刚 (283)

光学计量与测试

- 目标辐射特性现场校准用大面积黑体辐射源技术研究
..... 李 超, 张玉国, 刘保炜, 曹 静, 郭亚玘, 王加朋 (292)

激光跟踪仪检测大口径非球面方法研究	陈佳夷,王 聪,霍腾飞,程德级 (299)
基于光学相干测振系统的微悬臂梁缺陷检测	贾美英,钟舜聪,周 宁,林杰文,张秋坤 (304)
可用于现场快速检测的小型化多通道光谱测量系统	简 丹,刘 诚 (310)
基于傅里叶变换的细胞牵引力测量研究	温 娜,张 帆 (317)
基于规范化样本拆分的轴承缺陷检测	徐建桥,吴 俊,陈向成,吴丹超,李 兵 (327)

光学器件与制造

离轴反射式平行光管设计及次镜检验方案研究	孙永雪,夏振涛,王 珂,姜守望,陈刚义,范 嵘,李 涛 (334)
液体透镜的透射波前特性研究	卢佳玮,袁道成,刘 乾 (339)
大长径比皮料玻璃管加工工艺研究及应用	苏德坦,孙建宁,陈晓倩,毛汉祺,韩晓明,杨 光,肖 杰,张正君,赵慧民 (346)
基于多目标人工鱼群算法的光疗 LED 照度优化研究	唐清焱,吴 燃,纪佳佳,刘峻源,李章勇 (352)

光纤传感与光通信

加速度场下陀螺光纤环形变的影响分析	王斌华,黄迟航,胡 桥,孔 军,陈 平 (360)
基于 PDMS 薄膜的等离子体光栅仿真分析	陈壮壮,王志斌,李克武,吴笑男 (371)

广 告 “军用光电系统与工程”专题征文通知（封二）；国防科技工业光学一级计量站（彩插 1~4）；光电对抗测试仪器与系统（封三）；深圳市通瑞科技有限公司（封四）

本期责任编辑：王丽

期刊基本参数：CN 61-1171/O4 * 1980 * b * A4 * 170 * zh * P * ￥50.00 * 1500 * 24 * 2021-03

Contents

OE SYSTEM AND ENGINEERING

- Analysis of mass and friction effect of negative stiffness mechanism of rhombic HSLDS vibration isolator
..... YUAN Yijie, JI Ming, ZHANG Weiguo, et al. (207)
- Multi-objective optimization design and stability analysis of flexible support system for large rectangular collimator mirror PENG Yuanjing, XU Mingming, CHEN Yi, et al. (215)
- Design of high-definition pinhole lens optical system
..... SUN Yanchao, LUO Rui, LIANG Xiuling (223)
- Design of 40 $\times$ imaging objective lens in long-wave infrared band
..... LI Jincheng, XIE Hongbo, YANG Lei, et al. (229)
- Aberration calculation of catadioptric combined optical system with oblique incidence
..... ZHAO Xiaonan, LYU Lijun (236)
- Performance evaluation method of silicon-based optical phased array
..... ZHANG Yaoyuan, WANG Rui, JIANG Ruitao, et al. (242)
- Assembly and adjustment method of multi-reference axis transmission optical system
..... DU Guojun, WANG Chunyu, OU Zongyao, et al. (247)

OE INFORMATION ACQUISITION AND PROCESSING

- Research on image detection method of inner wall of circular hole based on 45 $^{\circ}$ reflector
..... SHI Yufei, CHEN Xin, CHEN Jigang (255)
- Improving effect of speckle autocorrelation reconstruction based on off-axis digital holography
..... LI Cong, XU Zhao, CHEN Jie, et al. (262)
- Research on accurate detection method of egg embryo activity based on convolutional neural network
..... GUO Meng, DONG Xinming, HAN Guang, et al. (268)
- Identification system for batch of two-dimensional code with high speed based on machine vision
..... LI Jian'gang, HUANG Shihao, ZHENG Qiqiang, et al. (276)

Hyperspectral images destriping approach with weighted block sparsity regularization and non-convex low-rank penalty YUAN Yuli, LYU Junrui, LUO Xuegang (283)

OPTICAL METROLOGY AND MEASUREMENT

Research on technology of large area blackbody radiation source used in field calibration for target radiation characteristics LI Chao, ZHANG Yuguo, LIU Baowei, et al. (292)

Research on detection method of large-aperture aspheric surface by laser tracker CHEN Jiayi, WANG Cong, HUO Tengfei, et al. (299)

Defect detection of micro-cantilever beams based on optical coherence vibrometer system JIA Meiyong, ZHONG Shuncong, ZHOU Ning, et al. (304)

Portable multi-channel spectral measurement system for rapid on-site detection JIAN Dan, LIU Cheng (310)

Research on cell traction measurement based on Fourier transform WEN Na, ZHANG Fan (317)

Bearing defects detection based on standardized sample split ... XU Jianqiao, WU Jun, CHEN Xiangcheng, et al. (327)

OPTICAL ELEMENT AND FABRICATION

Research on off-axis reflective collimator design and inspection scheme of secondary mirror SUN Yongxue, XIA Zhentao, WANG Ke, et al. (334)

Study on characteristics of transmission wavefront of liquid lens LU Jiawei, YUAN Daocheng, LIU Qian (339)

Research and application of processing technology of cladding-tube with large aspect ratio SU Detan, SUN Jian'ning, CHEN Xiaoqian, et al. (346)

Research on illumination optimization of phototherapy LED based on multi-objective artificial fish swarm algorithm TANG Qingyao, WU Ran, JI Jiajia, et al. (352)

FIBER SENSING AND OPTICAL COMMUNICATION

Analysis of influence of acceleration field on deformation of gyro fiber-optical ring WANG Binhua, HUANG Chihang, HU Qiao, et al. (360)

Simulation analysis of plasma grating based on PDMS thin films CHEN Zhuangzhuang, WANG Zhibin, LI Kewu, et al. (371)