

中国科技核心期刊



ISSN 1672-9870

长春理工大学学报

JOURNAL OF CHANGCHUN UNIVERSITY OF
SCIENCE AND TECHNOLOGY

自然科学版

原长春光学精密机械学院学报



第 35 卷 第 2 期

Vol.35 No.2

2012 2

中国·长春
Changchun China

万方数据

长春理工大学学报(自然科学版)

第35卷 第2期

2012年6月

目次

地球同步轨道空间双轴追日跟踪系统设计	徐拓奇, 闫勇, 刘春雨, 金光(1)
口盲型紫外探测系滤光膜的研制	闫昊, 付秀华, 郑爽(5)
一种高精度高可靠性调焦机构设计	薛乐堂, 陈涛, 徐涛, 姜润强(9)
Ws832分光数码望远镜光学系统设计	张东虎, 罗春华(12)
一种激光扩束镜换位机构设计	于萍(16)
长波制冷型热像仪光学系统设计	鲍智康, 王春艳, 王路, 杨娇华(19)
激光瞄具多轴一致性检测系统研究	柏公欣, 安志勇, 肖作江, 张丹枫, 汪燕青, 陈轩(21)
基于波前编码技术红外光学系统无热化研究	吕天宇, 杨飞, 明名(26)
长焦距航空遥感器的光学装调	李大伟(29)
星载多光谱相机光学系统设计	张丹枫, 付跃刚, 柏公欣(33)
高精度星模拟器光机系统与支撑结构设计及其模态分析	韩乐, 张国玉, 孙高飞, 孙向阳(36)
衍射复眼望远镜系统光学特性分析	岳中英, 鞠曙光, 岳明, 姜义, 文大化(40)
桅杆型光电探测系统总体可靠性分配与校核研究	陈兆兵, 王兵, 庄昕宇(45)
高精度液体温控难点分析及解决方法述评	王绍治, 张玲花, 王君林(48)
车载机枪校正训练模拟系统的研究	吴英春, 徐熙平, 卢常丽, 于琳(53)
小型无人机自动驾驶仪控制系统的研究	刘柱, 杨进华, 高峰, 刘希佳(56)
CCOS技术中去除函数的提取算法研究	刘健, 王绍治, 王君林(60)
高低温环境下的微光瞄具可靠性试验系统方案研究	闫俊岑, 石利霞(64)
Matlab对激光干涉纳米阵列的仿真与研究	王大鹏, 车英(67)
基于线阵CCD的二维成像系统研究	卢常丽, 徐熙平, 吴英春, 谷晨阳(71)
柱面微透镜阵列用于提高OLED图像质量的研究	张凯华, 董连和, 孙艳军, 冷雁冰, 陈哲(74)
基于ARM9的PSD数据采集与处理系统研究	任一飞, 徐熙平, 王春阳, 苏玉靖(79)
基于全光谱输出太阳模拟器氙灯光源的研究	高玲, 张国玉, 苏拾, 焦阳(82)
基于奇异值分解估计点扩散函数的复原算法研究	赵群, 石秀英, 徐亮, 杨进华, 李松, 朱彦(85)
小型面源黑体在红外目标模拟器的应用	董时, 冯进良, 丁铂, 林森, 崔翥, 闫加俊(89)
基于序列图像的湍流退化图像复原方法研究	朱彦, 赵鑫, 杨进华, 高峰, 王照轶(93)
航空传感器胶片盒的设计	张继超, 郑丽娜(97)
光电编码器信号相位自动补偿方法研究	张志杰, 曹国华, 杨艳, 任峰(100)
14~16.25 μm 红外探测器响应率测试系统辐射功率的研究	葛枢, 张国玉, 王凌云, 王向东, 宋文武, 高玉军(103)
基于靶场红外图像的弱小目标检测技术研究	李阳, 张永辉, 修大明(106)
不可逆汽机热泵有限时间热力学优化	赵麒, 谭羽飞(110)
巡检机器人末端执行机构的参数化设计与优化设计方法	金珈成, 赵殿全, 龙志伟, 许金凯(115)
一种高电源抑制比的LDO电路设计	王磊, 王刚, 许博谦(118)
楼宇间无线激光图像通信系统的设计	王照轶, 朱彦, 杨进华, 姜成昊, 赵振明(122)
一种无功补偿装置设计与仿真	闫国琦, 庞树杰, 李继宇(126)
激光通信光端机粗跟踪性能检测方法研究	车吉元, 孟立新, 张立中(130)
励磁涌流的参数化时频分析	赵立新, 苏玮, 伍良生(134)
以 Co_2O_3 作着色剂制备彩色水泥的研究	邓凤萍, 宋洪雁, 狄娜(138)
钴钇掺杂(Ba, Sr) TiO_3 基介电陶瓷的制备与性能研究	王学荣, 刘全生, 万玉春(142)
分相温度及时间对CPG孔径影响的研究	王晓春, 宋立, 曾丹丹(145)
水净化处理用多孔玻璃纤维的研制	安春爱, 刘博林(148)
改性木粉/PVC复合材料的制备与性能研究	刘丽, 任秀艳, 吴广峰(151)
ICP-AES法测定矿石中的锡	云作敏, 全丽(154)
一种基于遗传程序设计的数据拟合方法	任志鹏, 陈纯毅, 崔广才(157)
信息技术在振动测试中的应用	陈琳荣, 文大化(160)
基于oracle的电子病历管理信息系统的开发	孙文静, 陈廷寅, 夏炜(164)
基于JSON的高级AJAX在汽车定位中的应用与分析	王鹏, 刘圣财, 董洋(169)
基于量子粒子群算法的测试数据自动生成算法	于振洋(173)

CONTENTS

Geosynchronous Orbit Dual-axis Sun Tracking System Design	XU Tuoqi, YAN Yong, LIU Chunyu, JIN Guang(1)
Design and Fabrication of Visible-blind UV Detectors System Filter	YAN Hao, FU Xiuhua, ZHENG Shuang(5)
A High Precision and Reliability Focusing Mechanism Design	XUE Letang, CHEN Tao, XU Tao, JIANG Runqiang(9)
Design of Ws832 Light Splitting Digital Monocular Optical System	ZHANG Donghu, LUO Chunhua(12)
Transposition Mechanism Design of a Laser Beam Expander.....	YU Ping(16)
Optical System Design of a Refrigeration Type Long Wave Thermal Imager	BAO Zhikang, WANG Chunyan, WANG Lu, YANG Jiaohua(19)
Research on Detection System for Multi-axes Parallelism of Laser Sighting Telescope	BAI Gongxin, AN Zhiyong, XIAO Zuojiang, ZHANG Danfeng, WANG Yanqing, CHEN Xuan(21)
Research on Athermalization of Infrared Optical System Based on Wavefront Coding	LV Tianyu, YANG Fei, MING Ming(26)
Optical Alignment of Long Focus Aerial Camera	LI Dawei(29)
The Optical Design of Space-borne Multi-spectral Camera	ZHANG Danfeng, FU Yuegang, BAI Gongxin(33)
Opto-Mechanical System and the Supporting Structure Design and Modal Analysis for very High Accuracy Star Simulator	HAN Le, ZHANG Guoyu, SUN Gaofei, SUN Xiangyang(36)
Optical Characteristic Analysis of the Diffractive Compound Telescope	YUE Jinying, JU Shuguang, YUE Ming, JIANG Yi, WEN Dahua(40)
The Reliability Distributing and Checking Research of the Whole Mast Opto-electronic Detecting System	CHEN Zhaobing, WANG Bing, ZHUANG Xinyu(45)
Review of Difficulty Analysis and Solution in High Precision Liquid Temperature Control	WANG Shaozhi, ZHANG Linghua, WANG Junlin(48)
The Machine Guns Correction Training Simulation System for Research	WU Yingchun, XU Xiping, LU Changli, QI Lin(53)
Research of Control System of Autopilot for Mini-unmanned Aerial Vehicles	LIU Zhu, YANG Jinhua, GAO Feng, LIU Xijia(56)
Study on Extract Algorithm of Removing Function in CCOS Technology	LIU Jian, WANG Shaozhi, WANG Junlin(60)
Research of Reliability of Detection System Solutions under High and Low Temperature Environments Low-light Sights	YAN Juncen, SHI Lixia(64)
The Simulation and Research on Laser Interference Nanoarray by Matlab	WANG Dapeng, CHE Ying(67)
Based on the Linear CCD of Researching 2D Imaging System	LU Changli, XU Xiping, WU Yingchun, GU Chenyang(71)
The Research on Using Cylindrical Microlens Arrays to Improve the Image Quality of OLED	ZHANG Kaihua, DONG Lianhe, SUN Yanjun, LENG Yanbing, CHEN Zhe(74)

- Research on PSD Data Acquisition and Processing System
Based on ARM9 REN Yifei, XU Xiping, WANG Chunyang, SU Yujing(79)
- Study on Xe-lamp Sources of Full Spectrum
Solar Simulators GAO Ling, ZHANG Guoyu, SU Shi, JIAO Yang(82)
- An Image Restoration Algorithm Based on Estimation of PSF
Using SVD ZHAO Qun, SHI Xiuying, XU Liang, YANG Jinhua, LI Song, ZHU Yan(85)
- Minitype Extend Blackbody in the Application of IR Target
Simulator DONG Shi, FENG Jinliang, DING Bo, LIN Sen, CUI Wei, YAN Jiajun(89)
- Atmospheric Turbulence Distorted Image Restoration Based on
Image Sequence ZHU Yan, ZHAO Xin, YANG Jinhua, GAO Feng, WANG Zhaoyi(93)
- Design of Film Holder on Aerial Remote Sensor ZHANG Jichao, ZHENG Lina(97)
- Research on the Method of Signal Phase Automatic Compensation for
Photoelectric Encoder ZHANG Zhijie, CAO Guohua, YANG Yan, REN Feng(100)
- Research of 14~16.25 μm Infrared Detector Response Rate Test System Radiation
Power GE Shu, ZHANG Guoyu, WANG Lingyun, WANG Xiangdang, SONG Wenwu, GAO Yujun(103)
- Design of Small and Dim Target Detection System Base on the Range of
Infrared Images LI Yang, ZHANG Yonghui, XIU Dapeng(106)
- General Performance Characteristics of an Irreversible Heat Pump System Driven by Steam
Turbine Using Finite Time Thermodynamic Approach ZHAO Qi, TAN Yufei(110)
- Parametric and Optimization Design Methods of End-effector Mechanism of
Inspection Robot JIN Jiacheng, ZHAO Dianquan, LONG Zhiwei, XU Jinkai(115)
- Design of a Low-dropout Regulator with High Power Supply
Rejection Ratio WANG Lei, WANG Gang, XU Boqian(118)
- The Design of Laser Image Communication System between the
Buildings WANG Zhaoyi, ZHU Yan, YANG Jinhua, JIANG Chenghao, ZHAO Zhenming(122)
- Design and Simulation of a Var Compensation Equipment YAN Guoqi, PANG Shujie, LI Jiyu(126)
- Research for Detect Measure of Crude-tracking Precision of Laser Communication
Transceiver MU Jiyuan, MENG Lixin, ZHANG Lizhong(130)
- A Time-frequency Analysis of Transformer Inrush ZHAO Lixin, SU Wei, WU Liangsheng(134)
- The Study on the Color Cement Preparation with
 Co_2O_3 as Pigments DENG Fengping, SONG Hongyan, DI Na(138)
- Preparation and Properties of $\text{Y}^{3+}/\text{Co}^{3+}$ Doping $(\text{Ba}, \text{Sr})\text{TiO}_3$
Dielectric Ceramic WANG Xuerong, LIU Quansheng, WAN Yuchun(142)
- The Effects of Phase Separation Temperatures and Time on the Porous Size of
Controlled Pore Glass WANG Xiaochun, SONG Li, ZENG Dandan(145)
- Study on the Porous Glass Fiber Using for Water
Purification Treatment AN Chun'ai, LIU Bolin(148)
- Study on Preparation and Properties of Modified Wood-flour /PVC
Composite LIU Li, REN Xiuyan, WU Guangfeng(151)
- ICP-AES Determines Tin in Ore YUN Zuomin, JIN Li(154)
- A Method of Data Fitting Based on Genetic Programming REN Zhipeng, CHEN Chunyi, CUI Guangcai(157)
- Application of Information Technology CHEN Linrong, WEN Dahua(160)
- The Development of Electronic Medical Record System based on Oracle ... SUN Wenjing, CHEN Tingyin, XIA Wei(164)
- The Application and Analysis of Advanced AJAX Based on JSON in Vehicle
Positioning System WANG Peng, LIU Shengcai, DONG Yang(169)
- Algorithm for Automatic Generation of Test Data Based on Quantum Particle
Swarm Optimization YU Zhenyang(173)