



中国科技核心期刊

ISSN 1672-9870

CN 22-1364/TH

# 长春理工大学学报

## 自然科学版

JOURNAL OF CHANGCHUN UNIVERSITY OF  
SCIENCE AND TECHNOLOGY

(NATURAL SCIENCE EDITION)

第45卷 第5期

Vol.45 No.5

2022年 10月

Oct. 2022

ISSN 1672-9870



9 771672 987227

10>

# 5

# 2022

目 次

高温工况下经纬仪立柱材料对横轴差影响分析 ..... 闫佳钰,牛文达,王冲,王强龙,刘震宇(1)

凹面输出镜透过率对谐振腔球差的影响 ..... 黄琳贺,冯驰,董渊,金光勇(8)

基于鬼成像技术的光谱增强研究 ..... 闫凌浩,王晓茜,邵嘉琪,高超,刘娜(14)

基于计算鬼成像的层析成像研究 ..... 邵嘉琪,李畅,闫凌浩,刘娜,张烨(20)

用于5 G分光器件低损耗滤光膜的研究 ..... 陈星聿,付秀华,朱忠尧,张功,檀承启(26)

折/衍混合式VR显示光学系统设计 ..... 江宝林,石利霞,郑茹,文燕燕,张丽芳(32)

二维动态显微镜的光学系统设计 ..... 路雨桐,冯大伟,向阳,刘永坤,吕思航(38)

基于实测数据阵列式多组件虚拟装配技术研究 ..... 詹睿,朱运东,林雪竹,郭丽丽,唐钰(44)

基于机器视觉的对刀间隙检测方法研究 ..... 孙齐伟,李英(53)

工艺参数对鲜米机留胚率影响的研究 ..... 王思佳,王振宏,石金宝(61)

基于模糊RBF导纳控制的恒力打磨技术研究 ..... 姜涛,毕建民(67)

改进的LeNet-5网络在图像分类中的研究 ..... 陈恩志,王春阳,李晨晨,吴夏铭(74)

基于改进粒子群算法的云计算调度策略 ..... 马钰,杨迪,王鹏(80)

静电纺丝法制备LiMnTiO<sub>4</sub>纳米纤维及电化学性能研究 ..... 孔靖媛,王进贤(87)

基于T型微通道结构的微滴生成技术研究 ..... 张宁,朱海煊,郭旭,司远,宫平(93)

基于多监督残差网络的冠状动脉CT图像分割 ..... 顾峰,曹秒,蔡庆武,董麒,张坤(101)

微塑料对浮游植物群落的影响研究 ..... 李宇佳,孙萍,张翔宇,徐宗军,王清爽,王宗灵(107)

点源反演问题的神经网络方法研究 ..... 张平,孟品超,尹伟石(117)

多子群多策略差分进化算法 ..... 高媛,姜志侠,刘宇宁(123)

基于手机信令数据的用户位置预测方法研究 ..... 吴雨佳,尹伟石,孟品超(130)

基于Petri网的消费者维权索赔流程模型优化分析 ..... 刘磊,陶小燕(138)

CONTENTS

Analysis of the Influence of Theodolite Column Material on the Transverse Axis Difference Under High  
Temperature Conditions ..... YAN Jiayu, NIU Wenda, WANG Chong, WANG Qianglong, LIU Zhenyu(1)

Influence of the Transmittance of Concave Output Mirror on the Spherical Aberration  
in the Resonant Cavity ..... HUANG Linhe, FENG Chi, DONG Yuan, JIN Guangyong(8)

Spectral Enhancement Based on Ghost Imaging Technology  
..... YAN Linghao, WANG Xiaoqian, SHAO Jiaqi, GAO Chao, LIU Na(14)

Tomography Research Based on Computational Ghost Imaging  
..... SHAO Jiaqi, LI Chang, YAN Linghao, LIU Na, ZHANG Ye(20)

Research on Low-loss Filter Film for 5 G Optical Splitters  
..... CHEN Xingyu, FU Xiuhua, ZHU Zhongyao, ZHANG Gong, TAN Chengqi(26)

Design of Refraction/Diffraction Hybrid VR Display Optical System  
..... JIANG Baolin, SHI Lixia, ZHENG Ru, WEN Yanyan, ZHANG Lifang(32)

Design of 2-D Dynamic Photoelectric Microscope  
..... LU Yutong, FENG Dawei, XIANG Yang, LIU Yongkun, LV Sihang(38)

Research on Array Multi-component Virtual Assembly Technology Based on Measured Data  
..... ZHAN Rui, ZHU Yundong, LIN Xuezhu, GUO Lili, TANG Yu(44)

Research on Tool Setting Clearance Detection Method Based on Machine Vision..... SUN Qiwei, LI Ying(53)

Study on the Effect of Process Parameters for Germ-remained Rate of  
Germ-remained Rice Whitener ..... WANG Sijia, WANG Zhenhong, SHI Jinbao(61)

Research on Constant Force Grinding Technology Based on Fuzzy RBF Admittance Control  
..... JIANG Tao, BI Jianmin(67)

Research on Improved LeNet-5 Network in Image Classification

..... CHEN Enzhi , WANG Chunyang , LI Chenchen , WU Xiaming(74)

Cloud Computing Scheduling Strategy Based on Improved Particle Swarm Optimization Algorithm

..... MA Yu, YANG Di, WANG Peng(80)

Research on Fabrication and Electrochemical Properties of LiMnTiO<sub>4</sub> Nano-fibers

by Electrospinning..... KONG Jingyuan, WANG Jinxian(87)

Research on Droplet Generation Technology Based on T-Microchannel Structure

..... ZHANG Ning, ZHU Haihuan, GUO Xu, SI Yuan, GONG Ping(93)

Coronary Angiography CT Image Segmentation Based on Multi Supervised Residual Network

..... GU Feng, CAO Miao, CAI Qingwu, DONG Qi, ZHANG Kun(101)

Study on the Impact of Phytoplankton Communities in Microplastics

..... LI Yujia, SUN Ping, ZHANG Xiangyu, XU Zongjun, WANG Qingshuang, WANG Zongling(107)

Research on Neural Network Methods for Inverse Point Source Problems

..... ZHANG Ping, MENG Pinchao, YIN Weishi(117)

Differential Evolution Algorithm of Multi-subgroup and Multi-strategy

..... GAO Yuan, JIANG Zhixia, LIU Yuning(123)

Research on User Location Prediction Method Based on Cell Phone Signaling Data

..... WU Yujia, YIN Weishi, Meng Pinchao(130)

Optimization Analysis of Petri Net-based Consumer Rights Claims Process Model

..... LIU Lei, TAO Xiaoyan(138)