

《西安理工大学学报》2018 年第 34 卷

总目次

第 1 期

基于信号流图法对单自由度行星轮系功率特性的研究 周新涛, 崔亚辉, 刘 凯 (001)

用于气溶胶探测光学雷达的 LED 光源的研制 钟文婷, 华灯鑫, 刘 君, 张 宸, 晏克俊 (006)

基于 ABAQUS 的高速冷滚打网格质量的研究
..... 姚 远, 李 言, 黄 赓, 袁启龙, 蒋显伟, 梁小明 (014)

流固耦合作用下大型地下厂房围岩稳定性分析 郭双枫, 李 宁, 刘乃飞, 吕 高 (020)

黄河上游茨哈峡水电站 4# 倾倒地稳定性研究 安晓凡, 李 宁 (029)

2015 年 9 月西安一次强降水过程及成因的综合诊断研究 李 博, 张 铭, 邹瑞森, 华灯鑫 (036)

基于电阻率求解渗透系数不同方法的对比研究 许增光, 王 雪, 柴军瑞, 覃 源 (043)

含小电源的地方电网区域自备投的研究
..... 杨金东, 肖 齐, 陶 晔, 李周龙, 李荣民, 李 佳, 冀婉舒, 郭鹏程, 余向阳 (048)

不同地铁环控系统颗粒物污染分布实测研究
..... 谷雅秀, 王姣姣, 谢静超, 刘加平, 潘 嵩, 王新如 (055)

复杂地形条件下的西部强风特性实测分析 高 亮, 白 桦, 刘健新, 张 玥 (061)

人工胶结球状颗粒材料的三轴试验研究 牛丽思, 刘奉银, 王松鹤, 张 昭 (068)

循环流化床机组的自抗扰控制研究 吴振龙, 张玉琼, 李东海, 王灵梅 (074)

供应链成员渠道选择行为博弈研究 孙军艳, 吴冰莹, 夏 田, 傅卫平 (081)

基于自由曲面设计的 LED 光源系统光束准直研究 刘国强, 赵 恒, 华灯鑫, 张 佳 (087)

黄土高填方工后沉降影响因素敏感性分析 周远强, 吴 宏, 朱才辉, 李 宁 (092)

四索驱动并联机构的模态实验 武云飞, 汤奥斐, 郭晓玲, 郑 腾, 纪磊磊 (099)

精密五轴联动机床非线性误差分析与后置处理 王妮娜, 张广鹏, 宋开文, 黄玉美 (104)

稀土 La 的添加对 Cu-Cr-Zr 合金组织与性能的影响
..... 杨 柳, 杨晓红, 康丹丹, 邹军涛, 肖 鹏 (110)

基于图像掩模和击中击不中变换的优化边缘提取算法 陈恺焯, 刘 昕, 王 咚 (116)

AZ63-Gd₁ 镁合金的显微组织和电化学性能 邓 博, 冯拉俊, 姜 丹, 吴伟星 (122)

第 2 期

混沌光纤通信研究进展与展望 姚俊良, 孙郁哲, 任海鹏 (127)

蓝海风中心办公楼动力特性的原位测试及分析 张俊发, 王 栋, 陶 磊 (134)

多空间被动式太阳能采暖建筑热工设计 桑国臣, 王文康, 朱轶韵, 赵 钦, 方 倩 (141)

基于 Licel 记录仪的激光雷达数据修正技术研究
..... 高 飞, 周 毅, 黄 波, 王 萌, 华灯鑫 (147)

崇寿寺砖塔结构地震损伤数值分析 司建辉, 李 凯, 卢俊龙, 陈 策, 李嘉怿 (153)

光伏板清洁装置横臂轻量化设计方法 杨世强, 侯玉庆 (159)

一种印刷机械故障标识检测新方法的研究 侯和平, 徐卓飞, 刘 凯, 赵庆海 (166)

考虑基岩影响的场地自振特性 范留明, 谢 超, 赵 钦 (172)

基于改进模糊物元法的电力自供区最优收购策略
..... 张 刚, 李芳锋, 张江滨, 王永庆, 张靠社, 陈 斐, 刘福潮 (178)

黄土地基不良地质界面瞬态地质雷达波形 FDTD 正演分析
..... 吕 高, 杨 杰, 李 宁, 胡德秀, 张 岩 (185)

冻融循环作用后花岗岩断裂性能的试验研究 贺晶晶, 师俊平 (192)

Pound-Drever-Hall 激光稳频系统线性化复频域建模及分析研究
..... 苏 娟, 焦明星, 张凌晨, 邢俊红 (199)

气候变化和人类活动对黄河源区径流影响的评估
..... 周 帅, 王义民, 郭爱军, 李紫妍, 黎云云, 郭志辉 (205)

对流占优扩散反应方程的定制有限点法 杨红红, 秦新强 (211)

单向拉伸对 P(VDF-HFP) 膜结晶相、介电和储能特性的影响
..... 周振基, 夏卫民, 孙倩倩, 曹 甜 (216)

含二苯并噻吩-S,S-二氧化物的给-受型齐聚噻吩衍生物的合成与表征
..... 何 刚, 段宗范, 李 康 (223)

一种求解热电联产经济调度问题的改进粒子群算法 李 磊, 吴亚丽 (228)

基于 BP 神经网络的纸张缺陷检测与识别研究 段 茵, 陈恺焯, 刘 昕, 张金凤 (235)

基于 Logistic 模型的上市公司股票价格操纵预判研究	张建锋, 付强, 杜金柱 (240)
企业内部控制、社会责任与可持续发展能力	夏斌, 候茜茜 (246)

第 3 期

基于 CFD 的凹印机冷却辊随动性能研究	武秋敏, 武吉梅, 王砚, 陈允春 (253)
初始解冻深度对冻融坡面侵蚀产沙过程的影响	程圣东, 杭朋磊, 李占斌, 张辉, 王添, 成玉婷 (257)
钢框架内填再生混凝土墙结构等效模型分析	孙立建, 郭宏超, 刘云贺, 刘杰 (264)
水平小圆管内超临界二氧化碳对流传热特性的试验研究	王军辉, 郭鹏程, 颜建国, 朱凤岭, 罗兴铤 (272)
轻钢住宅结构整体抗震性能的影响研究	潘秀珍, 赵登云, 刘辉, 张鹏, 田建勃 (278)
一种自抗扰控制凹印套准系统研究	卫延斌, 张海燕, 梁志欣 (287)
基于鸽群优化算法的含分布式电源配电网状态估计	白晨, 姚李孝, 曹雯 (294)
奇异分数阶 Laplacian 方程弱解存在唯一性的算子方法	王兴, 彭达瑶, 秦新强, 胡钢 (299)
巨子型有控结构体系基于失效路径的结构抗震性态研究	吴昊, 王砚, 张洵安, 李迪钊 (304)
基于 Spark 的水库群多目标调度粒子群并行化算法	马川惠, 李瑛, 黄强, 李凤 (309)
湿地污染物迁移扩散数值模拟	王丹丹, 冯民权, 孙小平, 焦梦 (314)
基于正交设计的大坝深层抗滑稳定敏感性分析	王雯, 顾中明, 杨杰, 李婷, 马春辉, 郭志辉 (321)
基于 Zanker 型流动调整器的平面双弯头流场特性研究	张巧玲, 曹佳豪, 杨振东, 李国栋, 薛文 (326)
强震作用下高拱坝抗震安全分析	李晓娜, 王嘉威, 李同春, 黄灵芝, 何金文 (332)
变压比工况下涡旋制冷压缩机内部流动特性研究	吴凯, 孙帅辉, 杨立博, 郭鹏程 (338)
基于上下文信息的自适应场景分类算法	史静, 朱虹 (344)
双摆头五轴龙门数控淬压机床后置处理算法研究	闫赛赛, 解瑞东, 高峰, 李艳, 赵天林, 张雪敏 (349)
母版网角对潜像防伪效果的影响	韩雪莹, 杨熙, 王琪, 葛乃馨 (354)
铝质气雾罐印刷图像变形处理的研究	石英军, 刘昕, 杨哲 (359)
收入结构、财政支出影响农村居民消费结构的实证研究	王艳, 郝丛卉, 卢虹好 (364)
县级尺度上人口城市化对区域经济增长的作用机制——来自陕西省 107 个区县的经验证据	赵璟, 党兴华 (371)

第 4 期

基于多源数据集估算缺资料地区地表净辐射及其时空变化特征	张晓龙, 沈冰, 黄领梅, 权全, 莫淑红, 梁晓燕 (379)
等离子鞘套随机特性对电波传播影响分析	刘江凡, 李慧, 焦子涵, 白光辉, 席晓莉 (388)
非均匀预紧载荷下轴承-轴系热特性的试验研究	吴文武, 洪军, 李旻, 李小虎, 张进华 (395)
基于小量级降雨预报的水库汛限水位动态控制风险分析	黄灵芝, 李守义, 司政 (401)
圆锥形单点增量成形件轴向精度研究	张敬冲, 李言, 吴学亮, 杨明顺, 袁启龙 (407)
北京某地铁站细颗粒物分布特性研究	潘嵩, 王洪伟, 王新如, 谷雅秀, 裴斐 (415)
α - Bi_2O_3 纳米纤维的制备及其光催化性能研究	杨帆, 姚秉华, 张亭 (422)
江门中微子实验中心探测器有机玻璃节点应力分析方法研究	吴帅, 马骁妍, 钱小辉, 衡月昆, 李华峰, 荆小平, 侯少静 (428)
温度变化对固支 FGM 输流管道横向振动的影响	郭静, 王忠民 (433)
基于 Budyko 方程的小理河流域径流响应研究	巩瑶, 莫淑红, 李子龙, 沈冰 (439)
淳化县水资源承载力预测评价	冯湘华, 宋孝玉, 晁智龙 (447)
基于视觉感知特征融合的图像质量评价	唐桂森, 郑元林, 廖开阳, 王玮 (454)
橘子采摘机器人目标识别定位方法与实验研究	杨帆, 李鹏飞, 刘庚, 王伟斌 (460)
基于 DEFORM-3D 的 GCr15 轴承钢车削残余应力的仿真研究	李鹏阳, 曹利平, 何进, 刘强, 王红新, 李言 (468)
基于随机骨料模型的再生混凝土单轴压缩数值模拟	姚泽良, 段东旭, 党发宁, 张芳芳 (475)
陕北供水网络方案的多方法综合评价	张明, 白涛, 黄强 (481)
基于超声导波的管道缺陷量化评估仿真研究	梁伯翱, 赵镔, 王晓娟, 陈晓晓 (489)
基于改进证据理论的物联网安全态势评估	冯英伟, 王庆福, 吕国, 肖瑞雪 (495)
含砾黏性土力学特性分析	韩磊, 曹鹏, 喻豪俊, 刘恩龙 (502)
考虑响应时间的制造企业远程监控服务定价策略研究	吴琼, 陈菊红, 黄放, 张雅琪 (510)

JOURNAL OF XI'AN UNIVERSITY OF TECHNOLOGY

Vol. 34 2018

TOTAL CONTENTS

NO. 1

- Research on the power characteristics of single degree of freedom planetary gear train based on the signal flow graph method ZHOU Xintao, CUI Yahui, LIU Kai (001)
- Development of LED light source for aerosol detection optical radar
..... ZHONG Wenting, HUA Dengxin, LIU Jun, ZHANG Chen, YAN Kejun (006)
- Research on high speed cold roll-beating based on ABAQUS mesh quality
..... YAO Yuan, LI Yan, HUANG Geng, YUAN Qilong, JIANG Xianwei, LIANG Xiaoming (014)
- Surrounding rock stability analysis of large underground powerhouse under fluid-solid coupling interaction
..... GUO Shuangfeng, LI Ning, LIU Naifei, LÜ Gao (020)
- Study of the stability of 4# toppling mass in Cihaxia Hydropower Station on the upper Yellow River
..... AN Xiaofan, LI Ning (029)
- Study of a heavy rainfall case in Xi'an in September 2015 by using SACDM
..... LI Bo, ZHANG Ming, ZOU Ruisen, HUA Dengxin (036)
- Comparative study of different methods for calculating hydraulic conductivity based on resistivity
..... XU Zengguang, WANG Xue, CHAI Junrui, QIN Yuan (043)
- Study of the backup automatic switch of local power grid with small power YANG Jindong,
XIAO Qi, TAO Ye, LI Zhoulong, LI Rongmin, LI Jia, JI Wanshu, GUO Pengcheng, YU Xiangyang (048)
- Experimental study of distribution of the particulate matter pollution in different metro environment control systems
..... GU Yaxiu, WANG Jiaojiao, XIE Jingchao, LIU Jiaping, PAN Song, WANG Xinru (055)
- Field measurement analysis of wind characteristics of the typical complex terrain conditions in the west area
..... GAO Liang, BAI Hua, LIU Jianxin, ZHANG Yue (061)
- Triaxial tests on artificial cemented soil with spherical granular materials
..... NIU Lisi, LIU Fengyin, WANG Songhe, ZHANG Zhao (068)
- Research on active disturbance rejection control for circulating fluidized bed unit
..... WU Zhenlong, ZHANG Yuqiong, LI Donghai, WANG Lingmei (074)
- Game study of the choice behavior of the members of the supply chain channel
..... SUN Junyan, WU Bingying, XIA Tian, FU Weiping (081)
- Collimation of LED light source based on freeform surface
..... LIU Guoqiang, ZHAO Heng, HUA Dengxin, ZHANG Jia (087)
- Sensitivity analysis of influence factors of post-construction settlement on loess high fill embankment
..... ZHOU Yuanqiang, WU Hong, ZHU Caihui, LI Ning (092)
- Model testing of four-wire driven parallel mechanism
..... WU Yunfei, TANG Aofei, GUO Xiaoling, ZHENG Teng, JI Leilei (099)
- Nonlinear error analysis and post processing of precision five axis machine tool
..... WANG Nina, ZHANG Guangpeng, SONG Kaiwen, HUANG Yumei (104)
- Effect of La addition on microstructure and properties of Cu-Cr-Zr alloy
..... YANG Liu, YANG Xiaohong, KANG Dandan, ZOU Juntao, XIAO Peng (110)
- An algorithm for optimized edge detection based on image mask and Hit-miss transform
..... CHEN Kaixuan, LIU Xin, WANG Dong (116)
- Effect of gadolinium on microstructure and electrochemical properties of AZ63 magnesium alloy
..... DENG Bo, FENG Lajun, JIANG Dan, WU Weixing (122)

NO. 2

- Chaotic optical fiber communication system: a survey and prospect
..... YAO Junliang, SUN Yuzhe, REN Haipeng (127)
- In situ test on and analysis of dynamic characteristics of Lafonce office building
..... ZHANG Junfa, WANG Dong, TAO Lei (134)
- Study of thermal design of multi space passive solar heating building
..... SANG Guochen, WANG Wenkang, ZHU Yiyun, ZHAO Qin, FANG Qian (141)
- Study of the calibration techniques for lidar data using Licel transient recorders
..... GAO Fei, ZHOU Yi, HUANG Bo, WANG Meng, HUA Dengxin (147)
- Numerical analysis of seismic damage of a masonry pagoda in Chongshousi Temple

.....	SI Jianhui, LI Kai, LU Junlong, CHEN Ce, LI Jiayi (153)
Lightweight design method for the cross arm of photovoltaic panels cleaning device	..... YANG Shiqiang, HOU Yuqing (159)
A new detection method for fault identity of printing machine	..... HOU Heping, XU Zhuofei, LIU Kai, ZHAO Qinghai (166)
Natural vibration properties of engineering sites considering bedrock effect	..... FAN Liuming, XIE Chao, ZHAO Qin (172)
Optimal acquisition strategy for electricity self-supply area based on the improved fuzzy matter-element method	ZHANG Gang, LI Fangfeng, ZHANG Jiangbin, WANG Yongqing, ZHANG Kaoshe, CHEN Fei, LIU Fuchao (178)
FDTD forward of transient GPR waveform on adverse geological interface of loess foundation	..... LÜ Gao, YANG Jie, LI Ning, HU Dexiu, ZHANG Yan (185)
Research on fracture performance test on granite under effect of freeze-thaw cycle	..... HE Jingjing, SHI Junping (192)
Linearized complex frequency domain modeling and analysis of Pound-Drever-Hall laser frequency stabilization system	..... SU Juan, JIAO Mingxing, ZHANG Lingchen, XING Junhong (199)
Assessment on impacts of climate change and human activities on runoff in source region of the Yellow River	..... ZHOU Shuai, WANG Yimin, GUO Aijun, LI Ziyang, LI Yunyun, GUO Zhihui (205)
Tailored finite point method for convection-dominated diffusion reaction equation	..... YANG Honghong, QIN Xinqiang (211)
Uniaxial-stretching induced crystal phase transition and its effect on dielectric and energy storage properties of the P (VDF-HFP) copolymer films	..... ZHOU Zhenji, XIA Weimin, SUN Qianqian, CAO Tian (216)
Synthesis and characterization of a donor-acceptor thiophene oligomer derivative with a dibenzothiophene-S,S-dioxides unite	..... HE Gang, DUAN Zongfan, LI Kang (223)
An improved particle swarm optimization algorithm for combined heat and power economic dispatch	..... LI Lei, WU Yali (228)
Research on paper defect detection and recognition based on BP neural network	..... DUAN Yin, CHEN Kaixuan, LIU Xin, ZHANG Jinfeng (235)
Study on the manipulation anticipation of listed companies' stock prices based on Logistic model	..... ZHANG Jianfeng, FU Qiang, DU Jinzhu (240)
Internal control, social responsibility and sustainable development ability of enterprises	..... XIA Bin, HOU Xixi (246)

NO. 3

Study on the servo performance of cooling roller in gravure press based on CFD	..... WU Qiumin, WU Jimei, WANG Yan, CHEN Yunchun (253)
Study of the influence of initial thawing depth on the erosion and sediment yield processes on freezing-thawing slope	..... CHENG Shengdong, HANG Penglei, LI Zhanbin, ZHANG Hui, WANG Tian, CHENG Yuting (257)
Equivalent model analysis of steel frame structure with recycled concrete infilled wall	..... SUN Lijian, GUO Hongchao, LIU Yunhe, LIU Jie (264)
Experimental studies on convection heat transfer of supercritical carbon dioxide in a horizontal circular mini-tube	..... WANG Junhui, GUO Pengcheng, YAN Jianguo, ZHU Fengling, LUO Xingqi (272)
Impact study of the whole structural seismic performance of web light-gauge joist steel system	..... PAN Xiuzhen, ZHAO Dengyun, LIU Hui, ZHANG Peng, TIAN Jianbo (278)
A study of gravure register system with active disturbance rejection control	..... WEI Yanbin, ZHANG Haiyan, LIANG Zhixin (287)
State estimation of distribution network with distributed generation based on pigeon-inspired optimization algorithm	..... BAI Chen, YAO Lixiao, CAO Wen (294)
Operator method for the existence and uniqueness of weak solution to a fractional Laplacian equation with a singular nonlinearity	..... WANG Xing, PENG Dayao, QIN Xinqiang, HU Gang (299)
Research on structural seismic behavior of mega-sub controlled structural system based on failure path	..... WU Hao, WANG Yan, ZHANG Xun'an, LI Dizhao (304)
Parallel particle swarm optimization algorithm based on Spark multi-objective optimal scheduling of reservoir group	..... MA Chuanhui, LI Ying, HUANG Qiang, LI Feng (309)
Numerical simulation of migration and diffusion of pollutants in wetland	..... WANG Dandan, FENG Minquan, SUN Xiaoping, JIAO Meng (314)
Sensitivity analysis of deep anti-sliding stability of dam based on orthogonal design	..... WANG Wen, GU Zhongming, YANG Jie, LI Ting, MA Chunhui, GUO Zhihui (321)
Study of flow field characteristics of plane double elbow based on Zanker perforated flow regulator	

- ZHANG Qiaoling, CAO Jiahao, YANG Zhendong, LI Guodong, XUE Wen (326)
Seismic safety analysis of high arch dam under strong earthquake
- LI Xiaona, WANG Jiawei, LI Tongchun, HUANG Lingzhi, HE Jinwen (332)
Internal flow characteristics of scroll refrigeration compressor under different pressure ratio conditions
- WU Kai, SUN Shuaihui, YANG Libo, GUO Pengcheng (338)
An adaptive scene classification algorithm based on contextual information
- SHI Jing, ZHU Hong (344)
Study of post processing of double swing head five-axis gantry NC quenching machine tool
- YAN Saisai, XIE Ruidong, GAO Feng, LI Yan, ZHAO Tianlin, ZHANG Xuemin (349)
Influence of master screening angle on hidden image anti-counterfeiting effect
- HAN Xueying, YANG Xi, WANG Qi, GE Naixin (354)
Study of treatment of printing image morphing of aluminum aerosol cans
- SHI Yingjun, LIU Xin, YANG Zhe (359)
An empirical study on the effect of income structure and fiscal expenditure on rural residents' consumption structure
- WANG Yan, HAO Conghui, LU Honghao (364)
Action mechanism for population urbanization of regional economic growth at county level: An empirical research based on 107 districts and counties in Shaanxi province China
- ZHAO Jing, DANG Xinghua (371)

NO. 4

- Estimation of surface net radiation and its temporal and spatial variations in ungauged region based on multi-source data sets
- ZHANG Xiaolong, SHEN Bing, HUANG Lingmei, QUAN Quan, MO Shuhong, LIANG Xiaoyan (379)
Effects of random characteristic of plasma sheath on the radio wave propagation
- LIU Jiangfan, LI Hui, JIAO Zihan, BAI Guanghui, XI Xiaoli (388)
Experimental investigation of thermal characteristics of rotor-bearing system under non-uniform preload
- WU Wenwu, HONG Jun, LI Yang, LI Xiaohu, ZHANG Jinhua (395)
Risk analysis of the dynamic control of reservoir flood limited level based on small scale rainfall forecast
- HUANG Lingzhi, LI Shouyi, SI Zheng (401)
Research on axial accuracy of cone type single point incremental forming parts
- ZHANG Jingchong, LI Yan, WU Xueliang, YANG Mingshun, YUAN Qilong (407)
Characteristics of PM2.5 distribution in a subway station in Beijing
- PAN Song, WANG Hongwei, WANG Xinru, GU Yaxiu, PEI Fei (415)
Preparation and photocatalytic property of α -Bi₂O₃ nanofibers
- YANG Fan, YAO Binghua, ZHANG Ting (422)
Analysis of stress method of acrylic node for central detector of Jiangmen underground neutrino observatory
- WU Shuai, MA Xiaoyan, QIAN Xiaohui, HENG Yuekun, LI Huafeng, JING Xiaoping, HOU Shaojing (428)
Effect of temperature variation on transverse vibration of the clamped pipe conveying fluid made of functionally graded materials
- GUO Jing, WANG Zhongmin (433)
Study on runoff response in Xiaolihe basin based on Budyko equation
- GONG Yao, MO Shuhong, LI Zilong, SHEN Bing (439)
Evaluation of Chunhua county's water resources carrying capacity prediction
- FENG Xianghua, SONG Xiaoyu, CHAO Zhilong (447)
Image quality assessment based on visual perception feature fusion
- TANG Zhisen, ZHENG Yuanlin, LIAO Kaiyang, WANG Wei (454)
A new identification and location method and experiment research on a kind of orange harvesting robots
- YANG Fan, LI Pengfei, LIU Geng, WANG Weibin (460)
Simulation analysis of residual stress in turning GCr15 bearing steel based on DEFORM-3D
- LI Pengyang, CAO Liping, HE Jin, LIU Qiang, WANG Hongxin, LI Yan (468)
Numerical simulation of recycled concrete under uniaxial compression based on random aggregate model
- YAO Zeliang, DUAN Dongxu, DANG Faning, ZHANG Fangfang (475)
Multi-methods comprehensive evaluation of water supply network schemes in northern Shaanxi
- ZHANG Ming, BAI Tao, HUANG Qiang (481)
Simulation study of the characterization of pipe defect based on ultrasonic guided-waves
- LIANG Boao, ZHAO Kai, WANG Xiaojuan, CHEN Xiaoxiao (489)
Security situation assessment on IOT based on improved evidence theory
- FENG Yingwei, WANG Qingfu, LÜ Guo, XIAO Ruixue (495)
Analysis of mechanical properties of viscous slip soils containing gravels
- HAN Lei, CAO Peng, YU Haojun, LIU Enlong (502)
Research on pricing strategy of remote monitoring service based on response time
- WU Qiong, CHEN Juhong, HUANG Fang, ZHANG Yaqi (510)