



美国《剑桥科学文摘(自然科学)》(CSA(NS))收录期刊
荷兰《文摘与引文数据库》(Scopus)收录期刊
中国科学引文数据库(CSCD)核心期刊
《中文核心期刊要目总览》核心期刊
中国科技核心期刊
RCCSE中国核心学术期刊(A)

ISSN 1006-754X
CN 33-1288/TH
CODEN GSXOAB

工程设计学报

CHINESE JOURNAL OF ENGINEERING DESIGN



浙江大学 主办
中国机械工程学会

Vol.26 No.3

Jun. 2019

中国·杭州 HANGZHOU, CHINA



万方数据

工程设计学报

Gongcheng Sheji Xuebao

第 26 卷 第 3 期

2019 年 6 月

目 次

设计理论与方法学

基于 Storm 流处理的数控机床运行数据监测方法的设计与实现

.....孙顺苗,何彦,吴鹏程,王乐祥,凌俊杰,李军(245)

创新设计

步态康复训练机器人人机交互信息感知系统郭冰菁,毛永飞,韩建海,李向攀,马金琦(252)

基于足底压力传感器的不控制减重比例下步态相位识别宋广玥,宋智斌,项忠霞(260)

大型球罐悬吊式液压传动回转检测平台设计刘召,由宏新,孙亮,杨玉玲,刘华清(267)

优化设计

某高轨星载数传天线的振动分析宋建虎(274)

纯电动汽车两挡变速器减振降噪研究王哲,陈勇,曹展,李光鑫,左扣成(280)

基于冲蚀磨损理论的新型内防喷器阀座锥角研究张晓东,陈龙(287)

双向光收发组件探测器端耦合和封装工艺分析颜科,张帆,仲顺顺,舒斌,戚媛婧(299)

建模、仿真、分析与决策

基于 CFD 与 ADAMS 的三角转子气动机设计与仿真钟功祥,邹迪,张兴(305)

移动式架车机伸缩托头-托架接触的有限元分析潘益明,于兰峰,韩露男,单逸峰(315)

基于状态空间模型的机床加工精度分析黄华,王庆文,郭润兰,刘晓健,张来喜(321)

整机和系统设计

基于 15F2K60S2 的农用无人机电源监控仪表设计杨少沛,李蒙,王得胜(330)

复合进给电解加工机床控制系统设计与测试孙伦业,付志波,王龙(338)

笔管缺陷自动化检测系统设计与研究张伟,高慧敏(346)

波纹补偿器故障诊断系统研制倪洪启,金驰,冯霏(354)

锯材指接自动涂胶设备的研制与应用杨增帅,陈东,吴雨生,张伟(364)

本刊被评为“2018 年度中国高校百佳科技期刊” (266)

本刊被收录为 2019—2020 年度中国科学引文数据库(CSCD)核心库期刊 (279)

《中文核心期刊要目总览》入编通知 (封三)

期刊基本参数:CN 33-1288/TH * 1994 * b * A4 * 126 * zh * P * ¥30.00 * 2000 * 16 * 2019-06

本期责任编辑:陈波 吴云

Contents

Design Theory and Methodology

- Design and implementation of monitoring method for CNC machine tool operating data based on Storm flow processing
.....SUN Shun-miao, HE Yan, WU Peng-cheng, WANG Le-xiang, LING Jun-jie, LI Jun (245)

Innovative Design

- Human-robot interactive information sensing system for gait rehabilitation training robot
.....GUO Bing-jing, MAO Yong-fei, HAN Jian-hai, LI Xiang-pan, MA Jin-qi (252)
- Gait phase recognition under proportion-uncontrolled body weight support based on plantar pressure sensor
.....SONG Guang-yue, SONG Zhi-bin, XIANG Zhong-xia (260)
- Design of suspended hydraulic transmission rotary detection platform for large spherical tank
.....LIU Zhao, YOU Hong-xin, SUN Liang, YANG Yu-ling, LIU Hua-qing (267)

Optimization Design

- Vibration analysis of a data transmission antenna on high orbit satelliteSONG Jian-hu (274)
- Research on vibration and noise reduction of two-speed transmission of pure electric vehicle
.....WANG Zhe, CHEN Yong, CAO Zhan, LI Guang-xin, ZUO Kou-cheng (280)
- Research on valve seat cone angle of new inner blowout preventer based on erosion wear theory
.....ZHANG Xiao-dong, CHEN Long (287)
- Analysis of coupling and packaging process for photodiode of bi-directional optical sub-assembly
.....YAN Ke, ZHANG Fan, ZHONG Shun-shun, SHU Bin, QI Yuan-jing (299)

Modeling, Simulation, Analysis and Decision

- Design and simulation of triangular air-powered rotary engine based on CFD and ADAMS
.....ZHONG Gong-xiang, ZOU Di, ZHANG Xing (305)
- Finite element analysis of telescopic head-bracket contact of mobile car machine
.....PAN Yi-ming, YU Lan-feng, HAN Lu-nan, SHAN Yi-feng (315)
- Machining accuracy analysis of machine tool based on state space model
.....HUANG Hua, WANG Qing-wen, GUO Run-lan, LIU Xiao-jian, ZHANG Lai-xi (321)

Whole Machine and System Design

- Design of power monitoring instrument for agricultural unmanned aerial vehicle based on 15F2K60S2
.....YANG Shao-pei, LI Meng, WANG De-sheng (330)
- Design and test of control system for compound feed electrochemical machine tool
.....SUN Lun-ye, FU Zhi-bo, WANG Long (338)
- Design and research of pen tube defect automation detection systemZHANG Wei, GAO Hui-min (346)
- Development of fault diagnosis system for corrugated compensatorNI Hong-qi, JIN Chi, FENG Fei (354)
- Development and application of automatic gluing equipment for finger-joint lumber
.....YANG Zeng-shuai, CHEN Dong, WU Yu-sheng, ZHANG Wei (364)