



ISSN 1008-973X

CODEN ZDXGFS

JOURNAL OF
ZHEJIANG UNIVERSITY
ENGINEERING SCIENCE

浙江大学学报

工学版

ISSN 1008-973X



9 771008 973214

7/2021

第 55 卷 第 7 期 Vol.55 No.7

中国·杭州 HANGZHOU CHINA

ZHEJIANG DAXUE XUEBAO (GONGXUE BAN)

浙江大学学报(工学版)

第 55 卷第 7 期

2021 年 7 月

目 次

· 机械工程 ·

基于扩张状态观测器估计的混合动力汽车协调控制 汪佳佳, 蔡英凤, 陈龙, 等 (1225)

大行程两自由度微定位夹持系统的设计与优化 林苗, 居勇健, 孟刚, 等 (1234)

高空作业平台臂架伸缩运动的横向振动特性 纪爱敏, 王豪, 邓铭, 等 (1245)

· 计算机与控制工程 ·

基于数据融合的 ABC-SVM 社区疾病预测方法 庞维庆, 何宁, 罗燕华, 等 (1253)

考虑医疗质量差异的医院转诊决策优化 王伟, 李娜 (1261)

基于宽度学习系统的 fMRI 数据分类方法 刘嘉诚, 冀俊忠 (1270)

补偿因子可调逆变器电压外环线性自抗扰控制 李洋, 齐蓉, 代明光 (1279)

· 土木工程、水利工程 ·

多跨连续梁桥顶推施工双导梁的优化分析 冀伟, 邵天彦 (1289)

基于剪切带扩展法的海底斜坡稳定性分析 沈佳轶, 库猛, 王立忠 (1299)

排桩式波浪能发电装置附近流场特性研究 许从昊, 姚宇, 郭婷, 等 (1308)

支护压力控制下隧道周围砂土变形破坏物质点法模拟 张春新, 朱鸿鹄, 李豪杰, 等 (1317)

可液化土层对地下结构地震影响的振动台试验 刘春晓, 陶连金, 边金, 等 (1327)

基于动态贝叶斯网络的 TBM 卡机风险预测 颜芳弟, 翟强, 顾伟红 (1339)

大跨越钢管塔双平臂抱杆的风致响应 黄铭枫, 魏歆蕊, 叶何凯, 等 (1351)

· 能源与环境工程 ·

碱性氢氧化物消除 NH_4Cl 积灰特性实验研究 倪玉国, 周昊, 胡世豪 (1361)

基于壳聚糖气凝胶的新型石油吸附剂研究进展 何璇, 周启星 (1368)

水下排气降噪装置设计及其降噪特性 张凌, 邢允, 叶豪杰, 等 (1381)

电场作用下液液系统中液滴变形的计算模型 张军, 崔玉敏, 何宏舟 (1391)

· 信息与电子工程 ·

0~21 GHz 高精度宽带硅基数字衰减器设计 刘美杉, 张为, 郝东宁 (1399)

CONTENTS

• Mechanical Engineering •

Coordinated control of hybrid electric vehicle based on extended state observer estimation

..... *WANG Jia-jia, CAI Ying-feng, CHEN Long, et al* (1225)

Design and optimization of large range 2-DOF micro-positioning clamping system

..... *LIN Miao, JU Yong-jian, MENG Gang, et al* (1234)

Lateral vibration behaviors of boom expansion of aerial work platform

..... *JI Ai-min, WANG Hao, DENG Ming, et al* (1245)

• Computer and Control Engineering •

ABC-SVM disease prediction method based on data fusion in community health care

..... *PANG Wei-qing, HE Ning, LUO Yan-hua, et al* (1253)

Optimization of referral decision considering differences in medical quality

..... *WANG Wei, LI Na* (1261)

Classification method of fMRI data based on broad learning system

..... *LIU Jia-cheng, JI Jun-zhong* (1270)

Linear active disturbance rejection control with adjustable compensation factor applied for outer voltage control of inverter

..... *LI Yang, QI Rong, DAI Ming-guang* (1279)

• Civil Engineering, Hydraulic Engineering •

Optimization analysis of double launching noses during launching construction of multi-span continuous girder bridge

..... *JI Wei, SHAO Tian-yan* (1289)

Stability analyses of submarine slopes based on shear band propagation method

..... *SHEN Jia-yi, KU Meng, WANG Li-zhong* (1299)

Study of flow characteristics around row of oscillating water column pile under regular waves

..... *XU Cong-hao, YAO Yu, GUO Ting, et al* (1308)

Material point method simulations of sand deformation and failure around tunnel controlled by support pressure

..... *ZHANG Chun-xin, ZHU Hong-hu, LI Hao-jie, et al* (1317)

Shaking table test of seismic effect of liquefiable soil layer on underground structure

..... *LIU Chun-xiao, TAO Lian-jin, BIAN Jin, et al* (1327)

Risk prediction of TBM jamming based on dynamic Bayesian network

.....XIE Fang-di, ZHAI Qiang, GU Wei-hong (1339)

Wind-induced response of crane structure with double flat arms for long-span transmission towers

.....HUANG Ming-feng, WEI Xin-rui, YE He-kai, et al (1351)

• **Energy and Environmental Engineering** •

Experimental study on characteristics of alkaline hydroxide to eliminate NH_4Cl ash deposition

.....NI Yu-guo, ZHOU Hao, HU Shi-hao (1361)

Research progress of new petroleum adsorbents based on chitosan aerogels

.....HE Xuan, ZHOU Qi-xing (1368)

Design of underwater exhaust noise reduction device and its noise reduction characteristics

.....ZHANG Ling, XING Yun, YE Hao-jie, et al (1381)

Numerical calculation model on discrete droplet deformation in liquid-liquid system under electric field

.....ZHANG Jun, CUI Yu-min, HE Hong-zhou (1391)

• **Information Science and Electronic Engineering** •

Design of 0~21 GHz wideband silicon-based digital attenuator with high accuracy

.....LIU Mei-shan, ZHANG Wei, HAO Dong-ning (1399)