



Ei Compendex核心期刊
RCCSE中国权威学术期刊

ISSN 1005-3026
CN 21-1344/T
CODEN DDXKEZ

东北大学学报

东北大学学报

自然科学版

Vol.42 No.11

自然科学版

Vol.42 No.11



JOURNAL OF
NORTHEASTERN UNIVERSITY
NATURAL SCIENCE

2021-11-15



中国·沈阳
Shenyang China

11
2021

东北大学学报(自然科学版)

Dongbei Daxue Xuebao (Ziran Kexue Ban)

第 42 卷 第 11 期 (总第 374 期) 2021 年 11 月

目 次

信息与控制

- 基于观测器的时滞 T-S 模糊广义切换系统的异步无源控制 杨冬梅, 王 傲(1521)
- 分数阶微分 Whittaker 平滑器 单 鹏, 何 年, 李志刚, 吴 缀(1527)
- 基于改进 TADW 的链路预测算法 陈东明, 孙政平, 于开帅, 王冬琦(1533)
- 一种基于深度学习的实时视频图像背景替换方法 谢天植, 雷为民, 张 伟, 李志远(1540)
- 基于相空间重构的心冲击信号房颤检测方法 蒋芳芳, 王浩乾, 程天庆, 洪楚航(1547)

材料与冶金

- Fe-Al 微叠层复合材料的制备及界面表征 祖国胤, 张 影, 魏振雄, 满 婷(1554)
- NdFeB 基底温度对 TiN 防护膜耐腐蚀性的影响 谢元华, 邓文字, 王朋阳, 万 亿(1562)

机械工程

- 基于 SSO 算法优化神经网络的数控机床热误差建模 黄 智, 刘永超, 廖荣杰, 曹旭军(1569)
- 视觉搜索中图标布局的影响机理 金 涛, 明成业, 周淑芳, 何家敏(1579)

资源与土木工程

- 基于并行叠加的国土空间开发适宜性评价 杨宜舟, 吴立新, 郭甲腾, 刘善军(1585)
- 液氮冷却作用下三类高温岩石力学性能试验研究 董 硕, 沙 松, 蒙世仟, 荣 冠(1591)
- 基于 Voronoi 块体模型的砂岩力学特性研究 孙 浩, 陈帅军, 金爱兵, 李 海(1600)
- 考虑三维形貌参数的结构面峰值剪切强度预测新模型 王述红, 尹 宏, 张 泽, 魏 崴(1609)
- 注浆锚杆界面应力分析及临界锚固长度计算 张耀升, 王连广, 黄小斌, 陈百玲(1618)
- 基于优化的残差网络的锈蚀钢筋图像分类 方 亮, 周 云, 唐志泉(1625)
- 变径管道中粉尘爆炸传播实验与模拟 李 刚, 张晓宇, 黄庭川, 张洋洋(1634)

管理科学

- “政产学”协同对创业活跃度的影响——基于三螺旋视角的定性比较分析 贾建锋, 刘伟鹏, 张卫国(1640)
- 二维板材圆形件剪冲的四块排样算法 潘卫平, 樊治平, 黄 敏(1650)
- 基于动态情绪驱动的人员应急疏散模型 李佳洋, 唐加福, 郭恩铭(1656)
- 考虑车内拥挤状态的公交弹性发车间隔优化 裴玉龙, 杨世军, 潘恒彦(1663)

JOURNAL OF NORTHEASTERN UNIVERSITY

(NATURAL SCIENCE)

Volume 42 Number 11 (Sum 374) November 2021

CONTENTS

Information & Control

- Observer-Based Asynchronous Passive Control for T-S Fuzzy Generalized Switched Systems with Time Delay YANG Dong-mei, WANG Ao(1521)
- Fractional Differential Whittaker Smoother SHAN Peng, HE Nian, LI Zhi-gang, WU Zhui(1527)
- Link Prediction Algorithm Based on Improved TADW CHEN Dong-ming, SUN Zheng-ping, YU Kai-shuai, WANG Dong-qi(1533)
- A Real-Time Video Image Background Replacement Method Based on Deep Learning XIE Tian-zhi, LEI Wei-min, ZHANG Wei, LI Zhi-yuan(1540)
- Atrial Fibrillation Detection Method Based on Phase Space Reconstruction Using Ballistocardiogram Signal JIANG Fang-fang, WANG Hao-qian, CHENG Tian-qing, HONG Chu-hang(1547)

Materials & Metallurgy

- Preparation and Interface Characterization of Fe-Al Micro-laminated Composites ZU Guo-yin, ZHANG Ying, WEI Zhen-xiong, MAN Ting(1554)
- Effect of Substrate Temperature on Corrosion Resistance of NdFeB-Based TiN Protective Film XIE Yuan-hua, DENG Wen-yu, WANG Peng-yang, WAN Yi(1562)

Mechanical Engineering

- Thermal Error Modeling of Numerical Control Machine Tools Based on Neural Network by Optimized SSO Algorithm HUANG Zhi, LIU Yong-chao, LIAO Rong-jie, CAO Xu-jun(1569)
- Impact Mechanism of Icon Layout on Visual Search Performance JIN Tao, MING Cheng-ye, ZHOU Shu-fang, HE Jia-min(1579)

Resources & Civil Engineering

- Assessment of Suitability of Land Space Development Based on Parallel Spatial Overlay Analysis YANG Yi-zhou, WU Li-xin, GUO Jia-teng, LIU Shan-jun(1585)
- Experimental Investigation of Mechanical Properties of Three Types of High Temperature Rocks After Liquid Nitrogen Cooling DONG Shuo, SHA Song, MENG Shi-qian, RONG Guan(1591)
- Study on Mechanical Properties of Sandstone Based on Voronoi Block Model SUN Hao, CHEN Shuai-jun, JIN Ai-bing, LI Hai(1600)
- A New Prediction Model for Peak Shear Strength of Rock Joints Considering the 3D Morphology Parameters WANG Shu-hong, YIN Hong, ZHANG Ze, WEI Wei(1609)
- Analysis of Interface Stress of Grouting Rockbolt and Calculation of Critical Anchorage Length ZHANG Yao-sheng, WANG Lian-guang, Huang Xiao-bin, CHEN Bai-ling(1618)
- Image Classification of Corroded Steel Reinforcement Based on Optimized Residual Network FANG Liang, ZHOU Yun, TANG Zhi-quan(1625)
- Experiment and Simulation of Dust Explosion Propagation in Tapered Pipelines LI Gang, ZHANG Xiao-yu, HUANG Ting-chuan, ZHANG Yang-yang(1634)

Management Science

- Influence of "Government-Industry-University" Cooperation on Entrepreneurial Activity: Qualitative Comparative Analysis from the Perspective of Triple Helix JIA Jian-feng, LIU Wei-peng, ZHANG Wei-guo(1640)
- Four-Block Layout Algorithm for Two-Dimensional Plate Shearing and Punching of Circular Parts PAN Wei-ping, FAN Zhi-ping, HUANG Min(1650)
- Crowd Emergency Evacuation Model Based on Dynamic Emotion Drive LI Jia-yang, TANG Jia-fu, GUO En-ming(1656)
- Optimization of Buses' Flexible Departure Intervals Considering Crowdedness State PEI Yu-long, YANG Shi-jun, PAN Heng-yan(1663)

Serial parameters: CN21 - 1344/T * 1955 * m * A4 * 152 * zh * P * ¥ 15.00 * 1000 * 20 * 2021 - 11

Editor of this issue: YANG Hai-liang