



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

自然科学版

Vol.41 No.12

东北大学学报

自然 学 版

Vol.41 No.12



JOURNAL OF
NORTHEASTERN UNIVERSITY
NATURAL SCIENCE

ISSN 1005-3026

中国 · 沈阳
Shenyang China

2020-12-15

12
—
2020

东北大学学报(自然科学版)

Dongbei Daxue Xuebao (Ziran Kexue Ban)

第 41 卷 第 12 期 (总第 363 期) 2020 年 12 月

目 次

信 息 与 控 制

- 基于生成对抗网络的多目标行人跟踪算法 魏 纓, 徐楚翹, 刁兆富, 李伯群(1673)
基于 CGRU 模型的语音情感识别研究与实现 郑 艳, 陈家楠, 吴 凡, 付 彬(1680)
基于水平集方法的共轴流型液滴形态关键参数研究 胡 晟, 刘鑫琦, 吕晓永, 吴东旭(1686)
混沌参数优化 RBF 算法的震前 ENPEMF 信号强度趋势预测 郝国成, 锅 娟, 谭淑元, 曾佐勋(1692)
炼钢车间多天车动态仿真调度方案 李 稔, 徐安军(1699)

材 料 与 冶 金

- 7075-T6 合金超声辅助搅拌摩擦焊接头搅拌区组织与力学性能 张志强, 何长树, 赵 凤, 赵 骥(1708)
预焙炭阳极环形槽炭碗设计的仿真研究 李拓夫, 陶文举, 王兆文, 孔令宇(1715)

机 械 工 程

- 强磁场陶瓷结合剂 CBN 砂轮制备及磨削性能 石 莹, 王学智, 于天彪, 王宛山(1721)
基于磨粒轨迹的双端面磨削材料去除均匀性研究 李清良, 修世超, 张 鹏, 王 昆(1727)
基于 PIHISCMMS 失谐叶盘振动特性研究 孙红远, 袁惠群, 赵天宇(1733)
焊接顺序对 Q690 钢 T 型接头残余应力和变形的影响 兰亮云, 邵国庆, 张一婷, 王艺南(1741)
封闭加固型计算机板卡锁紧结构接触热阻分析 马国军, 牟翠翠, 管晓乐, 吴成伟(1747)
基于 CFD 的滚动转子压缩机排气阀片性能分析 邓文娟, 张英莉, 丁佳男, 巴德纯(1754)
基于烧蚀原理的激光抛光的数值建模与分析 徐辑林, 邹 平, 王文杰, 杨旭磊(1760)

资 源 与 土 木 工 程

- 沉积型铝土矿采空区矿柱 - 顶板支撑系统滑移突变失稳分析 姜立春, 谢 波(1767)
矿山复杂巷道网络组件式三维建模方法 贾庆仁, 车德福, 钟壬清(1774)

管 理 科 学

- 考虑多个子群意见的多要素大群体决策方法 李铭洋, 王 爽, 曹萍萍, 赵晓杰(1781)
基于熵权 TOPSIS 法的企业创新型技术人才价值评价 王 馨, 陈 妮, 赵雅雯(1788)
股指期货对股票市场正反馈交易的影响——基于中国 A 股市场的计量检验
..... 田树喜, 胡靖雪, 孙 荑, 王 健(1794)

数 学

- 仿射空间中的抛物型螺旋面 于延华, 彭兰兰, 贾 琛(1800)

JOURNAL OF NORTHEASTERN UNIVERSITY

(NATURAL SCIENCE)

Volume 41 Number 12 (Sum 363) December 2020

CONTENTS

Information & Control

A Multi-target Pedestrian Tracking Algorithm Based on Generated Adversarial Network	WEI Ying, XU Chu-qiao, DIAO Zhao-fu, LI Bo-qun(1673)
Research and Implementation of Speech Emotion Recognition Based on CGRU Model	ZHENG Yan, CHEN Jia-nan, WU Fan, FU Bin(1680)
Research on the Critical Parameters for Droplet Formation in Co-Flow Based on Level Set Method	HU Sheng, LIU Xin-qi, LYU Xiao-yong, WU Dong-xu(1686)
Intensity Trend Forecasting of the ENPEMF Signal Before Earthquake Based on Chaotic Parameters Optimized RBF Algorithm	HAO Guo-cheng, GUO Juan, TAN Song-yuan, ZENG Zuo-xun(1692)
Simulation-based Solution for Multi-crane Dynamic Scheduling in Steelmaking Shop	LI Ji, XU An-jun(1699)

Materials & Metallurgy

Microstructure and Mechanical Properties of the Stirred Zone of Ultrasonic Assisted Friction Stir Welded Joint of 7075-T6 Alloy	ZHANG Zhi-qiang, HE Chang-shu, ZHAO Su, ZHAO Xiang(1708)
Numerical Study on the Ringly-Slotted Stub Hole Design for Prebaked Anode	LI Tuo-fu, TAO Wen-ju, WANG Zhao-wen, KONG Ling-yu(1715)

Mechanical Engineering

Preparation and Grinding Performance of High Magnetic Field Vitrified Bond CBN Grinding Wheel	SHI Ying, WANG Xue-zhi, YU Tian-biao, WANG Wan-shan(1721)
Study on Surface Material Removal Uniformity in Double Side Grinding Based on Abrasive Particle Trajectories	LI Qing-liang, XIU Shi-chao, ZHANG Peng, WANG Kun(1727)
Study on Vibration Characteristics of Mistuned Blisk Based on PIHISCMMSM	SUN Hong-yun, YUAN Hui-qun, ZHAO Tian-yu(1733)
Influence of Welding Sequence on Residual Stress and Deformation of T-Joint of Q690 Steel	LAN Liang-yun, SHAO Guo-qing, ZHANG Yi-ting, WANG Yi-nan(1741)
Analysis on Thermal Contact Resistance of the Connecting Structure in Enclosed Rugged Computer	MA Guo-jun, MU Cui-cui, GUAN Xiao-le, WU Cheng-wei(1747)
CFD-based Performance Analysis of a Discharge Valve Plate in the Rolling Rotor Compressor	DENG Wen-juan, ZHANG Ying-li, DING Jia-nan, BA De-chun(1754)
Numerical Modeling and Analysis of Laser Polishing Based on Ablation Principle	XU Ji-lin, ZOU Ping, WANG Wen-jie, YANG Xu-lei(1760)

Resources & Civil Engineering

Analysis on Catastrophic Sliding of Pillar-Roof Supporting System in a Sedimentary Bauxite Goaf Mine	JIANG Li-chun, XIE Bo(1767)
Component-based 3D Modeling Method for Complex Mine Roadway Network	JIA Qing-ren, CHE De-fu, ZHONG Ren-qing(1774)

Management Science

Method for Large Group Decision-Making with Multiple Elements Considering Multiple Subgroup Opinions	LI Ming-yang, WANG Shuang, CAO Ping-ping, ZHAO Xiao-jie(1781)
Value Evaluation of Innovative Technical Talents in Enterprises Based on Entropy Weight TOPSIS	WANG Xin, CHEN Ni, ZHAO Ya-wen(1788)
Influence of Stock Index Futures on Positive Feedback Trading in the Stock Market: An Econometric Test in China's A-Share Market	TIAN Shu-xi, HU Jing-xue, SUN Ying, WANG Jian(1794)

Mathematics

Parabolic Helicoidal Surfaces in Affine Spaces	YU Yan-hua, PENG Lan-lan, JIA Kun(1800)
--	---

Serial parameters: CN21 - 1344/T * 1955 * m * A4 * 152 * zh * P * ¥ 15. 00 * 1000 * 20 * 2020 - 12

Editor of this issue: GU Tao