

目 次

研究论文

先驱体陶瓷材料 3D 打印机螺杆挤出装置的设计与优化

..... 李耀刚, 叶晓濛, 纪宏超, 张雪静, 郑 镭(1173)

基于本体的水稻育种方法应用知识库构建 赖英旭, 李亚娟, 刘 静(1181)

基于有限理性的随机网络路径选择模型 赵 磊, 关宏志, 张新洁, 朱俊泽(1192)

单排配筋聚苯模块复合墙体黏结性能试验研究 刘宏波, 曹万林, 乔崎云, 董宏英(1200)

地震作用下矩形柱体动水压力的简化模型 赵 密, 黄义铭, 王丕光(1212)

基于附加刚度法的结构试验机减振试验研究 纪金豹, 刘佳航(1218)

基坑工程钢楔式活络端力学性能试验研究 张明聚, 谢治天, 刘耀轩, 杨 萌, 张奇朋(1223)

地震动相位差谱的物理意义及拟合方法 韩 旭, 彭凌云, 王志涛, 苏经宇, 王丽华(1232)

MUCT 工艺反硝化除磷效率与 *Candidatus Accumulibacter* 的群落演替

..... 曾 薇, 李 超, 孟庆安, 马晨阳(1243)

香蕉皮混凝土的混凝与宏观特征的稳定性 付 英, 简海龙, 陆宁宁, 孟祥君, 狄 勇(1252)

高温相变蓄热电锅炉结构优化与数值模拟 唐志伟, 胡梦迪, 张学峰, 周燕昭, 鲁思宏(1261)

考虑疗效和安全性及其相关性的最优两阶段设计 尹 环, 王维真, 张忠占(1269)

研究述评

基于脉冲神经网络的类脑计算 王秀青, 曾 慧, 韩东梅, 刘 颖, 吕 锋(1277)

JOURNAL OF BEIJING UNIVERSITY OF TECHNOLOGY

Vol. 45

Dec. 2019

No. 12

CONTENTS

Articles

- Design and Optimization of the Screw Extrusion Device for a Precursor Ceramic Material 3D Printer *LI Yaogang, YE Xiaomeng, JI Hongchao, ZHANG Xuejing, ZHENG Lei*(1173)
- Construction of Ontology-based Rice Breeding Method Knowledge Base *LAI Yingxu, LI Yajuan, LIU Jing*(1181)
- Route Choice Model in Stochastic Network Based on Bounded Rationality *ZHAO Lei, GUAN Hongzhi, ZHANG Xinjie, ZHU Junze*(1192)
- Experimental Study on Bond Performance of Composite Wall With Single Row of Steel Bars and Polystyrene Module *LIU Hongbo, CAO Wanlin, QIAO Qiyun, DONG Hongying*(1200)
- Simplified Model for the Earthquake Induced Hydrodynamic Pressure on Rectangular Cylinder *ZHAO Mi, HUANG Yiming, WANG Piguang*(1212)
- Experimental Study on Shock Reduction of a Structural Testing Machine Based on Additional Stiffness Method *JI Jinbao, LIU Jiahang*(1218)
- Experimental Study on the Mechanical Properties of Steel Wedge Active Node in Braced Excavation Engineering *ZHANG Mingju, XIE Zhittian, LIU Yaoxuan, YANG Meng, ZHANG Qipeng*(1223)
- Optimal Fitting Method of Phase Difference Spectrum of Natural Seismic Wave *HAN Xu, PENG Lingyun, WANG Zhitao, SU Jingyu, WANG Lihua*(1232)
- Efficiency of Denitrifying Phosphorus Removal and Population Dynamics of *Candidatus Accumulibacter* in MUCT *ZENG Wei, LI Chao, MENG Qingan, MA Chenyang*(1243)
- Stability of a New Banana Coagulant: Coagulation Performance and Macro-micro Characteristics *FU Ying, JIAN Hailong, LU Ningning, MENG Xiangjun, DI Yong*(1252)
- Structural Optimization and Numerical Simulation of a High Temperature Phase Change Thermal Storage Electric Boiler *TANG Zhiwei, HU Mengdi, ZHANG Xuefeng, ZHOU Yanzhao, LU Sihong*(1261)
- Optimal Two-stage Designs With Consideration of Response and Safety and Their Correlation *YIN Huan, WANG Weizhen, ZHANG Zhongzhan*(1269)

Review

- Brain-inspired Computing Based on Pulsed Neural Networks *WANG Xiuqing, ZENG Hui, HAN Dongmei, LIU Ying, LÜ Feng*(1277)

Executive Editor: LIANG Jie

Responsible Editors: LÜ Xiaohong, LIANG Jie, ZHENG Xiaomei, YANG Kaiying, ZHANG Lei