

目 次

机械工程

- Y 型分叉冠状动脉血管中血液流动对血栓形成的影响 刘赵森, 马瑞艳, 张 谭, 叶红玲(1153)
- 含柔性铰链柔顺机构的驱动性能分析 王雯静, 余跃庆(1159)
- 不锈钢 X 射线应力测量 张亦良, 刘金艳, 徐学东(1165)
- 基于 CBR 和 RBR 混合推理的齿轮箱智能诊断技术
..... 高立新, 张建宇, 胥永刚, 彭世春, 任志强(1174)

电子信息与控制工程

- 新型 3.1 ~ 6 GHz 高增益超宽带低噪声放大器
..... 沈 珮, 张万荣, 金冬月, 谢红云, 尤云霞, 孙博韬, 肖 盈(1181)

建筑工程与交通工程

- 单排配筋带洞口剪力墙抗震试验及承载力计算 曹万林, 张建伟, 杨亚彬, 孙 超, 杨兴民(1186)
- 液氮快速冻结在城市地下工程中的研究 方江华, 张志红, 张景钰(1193)
- 试件特性对地震模拟振动台控制性能影响研究(II)
——对地震记录再现精度的影响及实时补偿 唐贞云, 李振宝, 周大兴, 纪金豹, 马 华(1199)
- 用防屈曲支撑改进钢框架-支撑结构抗震性能的设计方法
..... 高向宇, 张腾龙, 黄海涛, 王 鑫, 任 洁(1206)
- 大跨复杂屋面组合结构协同工作动力性能研究 王秀丽, 王 磊, 薛素铎(1215)
- 焊接空心球节点恒温加载试验 薛素铎, 冯 森, 邱林波(1222)
- 张集铁路旧堡隧道围岩初始应力反演分析及分级评价 王鹏程(1228)
- 山区双车道公路尾随相撞事故与道路线形的关系 王华荣, 孙小端, 贺玉龙, 胡希元(1236)

- 高可靠性应急备选路径启发式搜索算法 陈艳艳, 王东柱(1242)
- 城市公交港湾路面结构应力分析 张志清 白胜伟 王贵增 王文华 赵文丁(1248)
- 行车速度对沥青路面力学参数及响应的影响 赵延庆, 于 新, 谭忆秋(1253)

环境、能源与材料工程

锂低硅铝比沸石交换母液中锂离子的回收 I

- 萃取工艺研究 孙继红, 王丽娟, 黄 承(1258)
- 限氧曝气实现亚硝酸型同步硝化反硝化的研究 曾 薇, 张 悦, 李 磊, 王淑莹, 彭永臻(1263)
- SBR 工艺除磷过程控制与种群监测策略 崔有为, 丁洁然, 张立东, 王 蕊(1271)
- 塑料水杯中邻苯二甲酸酯的迁移污染评价 林兴桃, 王小逸, 刘超, 沈婷(1277)
- 混合动力电动汽车蓄电池特性的路试研究 周大森, 么居标, 吴 斌(1282)

计算机科学

- 基于神经网络的移动机器人路径规划 王 薇, 魏世民, 杨月巧, 姜运芳, 李端玲(1287)
- 蚁群算法融合粗糙集理论的属性约简算法 何 明, 马国亮, 孙立峰(1292)

责任编辑: 苗艳玲 张士瑛 刘 潇 终审、终校: 杨小玲

本期基本参数: CN11-2286/T * 1974 * m * A4 * 144 * zh + en * P * ¥20.00 * 1 000 * 23 * 2010-09

**JOURNAL OF BEIJING
UNIVERSITY OF TECHNOLOGY**

Vol. 36

Sep. 2010

No. 9

CONTENTS

Mechanical Engineering

Influence of Blood Flow on Thrombosis in Y-Bifurcation Coronary Arteries

..... LIU Zhao-miao, MA Rui-yan, ZHANG Tan, YE Hong-ling(1153)

Driving Characteristics of Compliant Mechanisms With Flexural Hinges

..... WANG Wen-jing, YU Yue-qing(1159)

X-ray Stress Measurement of Stainless Steel ZHANG Yi-liang, LIU Jin-yan, XU Xue-dong(1165)

Fault Diagnosis Technology Based on CBR&RBR for Gearbox of the Rolling Mills

..... GAO Li-xin, ZHANG Jian-yu, XU Yong-gang, PENG Shi-chun, REN Zhi-qiang(1174)

Electronic Information and Control Engineering

A Novel 3.1 ~ 6 GHz Ultra-wideband Low Noise Amplifier With High Gain

..... SHEN Pei, ZHANG Wan-rong, JIN Dong-yue, XIE Hong-yun,

YOU Yun-xia, SUN Bo-tao, XIAO Ying(1181)

Civil Engineering and Transportation Engineering

Experiment Study and Analysis of Seismic Performance of RC Shear Wall With Opening and Single Row of

Steel Bars CAO Wan-lin, ZHANG Jian-wei, YANG Ya-bin, SUN Chao, YANG Xing-min(1186)

Study on Liquefied Nitrogen Rapid Freezing in Urban Underground Engineering

..... FANG Jiang-hua, ZHANG Zhi-hong, ZHANG Jing-yu(1193)

The Effects on the Earthquake Simulation Caused by the Characteristics of the Specimen in the

Shaking Table Tests-Part (2): The Effects on the Replaying Precision of the Recorded Seismic

Waves and the Real-time Compensation

..... TANG Zhen-yun, LI Zhen-bao, ZHOU Da-xing, JI Jing-bao, MA Hua(1199)

The Design Method for Improving the Aseismic Performance of Concentrically Braced Steel Frames

with Buckling-restrained Brace

..... GAO Xiang-yu, ZHANG Teng-long, HUANG hai-tao, WANG Xin, REN Jie(1206)

Research on Dynamic Performance of Large-Span Complex Spatial Structure with Overall Working Behavior

..... WANG Xiu-li, WANG Lei, XUE Su-duo(1215)

Experimental Study on Welded Hollow Spherical Joints Under Loading and Constant Temperature

..... XUE Su-duo, FENG Miao, QIU Lin-bo(1222)

Back Analysis and Grading Evaluate of Surrounding Rock Primary Stress in a Railway Tunnel

..... WANG Peng-cheng(1228)

- Effects of Geometric Features of Rear-end Crash Accidents on Mountainous Two-Lane Highways
 WANG Hua-rong, SUN Xiao-duan, HE Yu-long, HU Xi-yuan(1236)
- Heuristic Algorithm for Emergency Candidate Paths With High Reliability
 CHEN Yan-yan, WANG Dong-zhu(1242)
- Stress Analysis of Pavement Structure on Harbor-shaped Bus Stop of City
 ZHANG Zhi-qing, BAI Sheng-wei, WANG Gui-zeng, WANG Wen-hua, ZHAO Wen-ding(1248)
- Effects of Vehicle Speed on Mechanical Properties of Asphalt Mixtures and Pavement Responses
 ZHAO Yan-qing, YU Xin, TAN Yi-qiu(1253)

Environment, Energy and Material Engineering

- Recovery of Lithium Ion From Exchanged Mother Liquids of Li-LSX Zeolite-Part 1 : Research on the
 Extraction Process SUN Ji-hong, WANG Li-juan, HUANG Cheng(1258)
- Simultaneous Nitrification Denitrification via Nitrite Under Limited Aeration
 ZENG Wei, ZHANG Yue, LI Lei, WANG Shu-ying, PENG Yong-zhen(1263)
- Strategy for Real-time Control of Phosphorus Removal and for Monitoring Community Structure in SBRs
 CUI You-wei, DING Jie-ran, ZHANG Li-dong, WANG Rui(1271)
- Evaluation of Phthalic Acid Esters Contamination in Plastic Containers
 LIN Xing-tao, WANG Xiao-yi, LIU Chao, SHEN Ting(1277)
- Research on Road Test of Auxiliary Power Hev Battery-Behavior
 ZHOU Da-sen, YAO Ju-biao, WU Bin(1282)

Computer Science

- Path Planning for a Mobile Robot using Neural Networks
 WANG Wei, WEI Shi-min, YANG Yue-qiao, JIANG Yun-fang, LI Duan-ling(1287)
- A Algorithm for Reduction of Attributes Based on Ant Colony Algorithm and Rough Set Theory
 HE Ming, MA Guo-liang, SUN Li-feng(1292)

Responsible Editors: ZHANG Shi-ying, MIAO Yan-ling, LIU Xiao

Final Reviewer and Final Reviser: YANG Xiao-ling