

ISSN 2096-3246
CN 51-1773/TB
CODEN GKYJAD

Advanced Engineering Sciences

工程科学与技术

2021 2 第53卷 第2期
Vol.53 No.2

· 水利与土木工程 ·

考虑坝后淤积的泥石流冲击拦挡坝动力响应研究	王东坡, 瞿华南, 沈伟, 何思明	1
基于时效差的山洪预警评定方法	张艳军, 邹蕙轩, 王协康, 张平仓, 许文盛	10
水下穿越管道悬空段受力特性的试验研究	杨庆华, 张宇倩, 杨乾, 王子聪	19
非饱和堆积土边坡降雨-渗流潜蚀耦合过程模拟	雷小芹, 刘恩龙, 何思明, 吴礼舟, 杨宗佶	28
风电塔在地震和风荷载下的失效概率评估	戴靠山, 赵志, 孟家瑶	38
地震作用下金沙江某跨江桥梁岩质岸坡动力响应分析	宋丹青, 黄进, 刘晓丽, 张鲁军, 王恩志	45
地应力张量特征对地下洞室轴线方位优化的启示	卢波, 张玉峰, 邹爱清, 董志宏	54
土遗址裂隙加固桩-浆协同效果与机制研究	崔凯, 汪小海, 湛文武, 冯飞, 程富强	66
干湿循环下石灰粉煤灰改良膨胀土的双屈服面本构关系	邓云叶, 文畅平	75
不同初始状态软黏土在主应力轴耦合旋转下的孔压及3维变形规律	王钰轲, 黄文清, 万永帅, 余翔, 韩沐森, 郭成超	84
复合地层盾构开挖面极限支护力上限分析	代仲海, 胡再强	95
掺加污泥灰对普通混凝土和再生混凝土力学性能的影响	石宵爽, 张宽裕, 栾晨晨, 代金芯, 杨富花	103
黏土-水混凝土接触面剪切特性试验研究	徐方, 陈乐, 赵春彦, 叶新宇, 郎锋, 冷伍明	110
基于基因表达式编程的NSM FRP-混凝土粘结强度预测模型	张芮棕, 薛新华	118

· 物联网 ·

基于最优刚性子图的势博弈无线传感器网络拓扑优化算法	魏连锁, 韩建, 金涛, 苏扬, 郭媛	125
基于学习自动机与萤火虫算法的链路预测	舒坚, 李睿瑞, 熊涛, 刘琳岚, 孙利民	133

· 信息工程 ·

基于分布式光纤传感系统的车辆轨迹提取方法	王茂宁, 李钟麒, 张建伟, 钟羽中	141
----------------------	--------------------	-----

· 化学工程与材料工程 ·

金属氢化物储氢反应器放氢特性的数值模拟	鲍泽威, 朱泽志, 牟晓锋, 闫栋	151
土田七中化学成分的分离与鉴定	马丽芳, 李燕, 陈凯, 汪伦	158
两种不同运行方式下好氧颗粒污泥培养及污染物去除性能对比研究	黄健盛, 郭银应, 刘德绍, 陈双扣, 陈秋竹, 温馨, 郑昊天, 谭俊峰, 唐倩	164

· 机械工程 ·

新型气液分离闪蒸撬分液侧内流场模拟研究	麻宏强, 王丽, 厚彩琴, 韩喜莲, 罗新梅, 李绍勇	171
高速滚珠丝杠副非赫兹接触应力计算	王民, 孙铁伟, 董朝阳, 孔德顺, 高相胜	178
滚轮平盘牵引式无级变速器自适应变速机构动力学分析	李超, 姚进, 李华, 胡波	187
干气密封螺旋槽激光加工工艺的ACE法优化	毛文元, 宋鹏云, 邓强国, 许恒杰, 孙雪剑	195

· HYDRAULIC & CIVIL ENGINEERING ·

Dynamic Response Analysis for Debris Flow Dam with Sediments	WANG Dongpo, QU Huanan, SHEN Wei, HE Siming	1
Flash Flood Warning Assessment Considering Temporal Differences	 ZHANG Yanjun, ZOU Yixuan, WANG Xiekang, ZHANG Pingcang, XU Wensheng	10
Experimental Study on the Loading Capacity of Suspended Section of Underwater Crossing Pipeline	 YANG Qinghua, ZHANG Yuqian, YANG Qian, WANG Zicong	19
Modelling of Coupled Process of Rainfall Infiltration and Internal Erosion Within Unsaturated Deposited Soil Slopes	 LEI Xiaoqin, LIU Enlong, HE Siming, WU Lizhou, YANG Zongji	28
Failure Probability Evaluations of a Wind Turbine Under Earthquakes and Wind Loads	DAI Kaoshan, ZHAO Zhi, MENG Jiayao	38
Dynamic Response Analysis of Rock Bank Slope of a Bridge Across Jinsha River Under Earthquakes	 SONG Danqing, HUANG Jin, LIU Xiaoli, ZHANG Lujun, WANG Enzhi	45
Implications of Geo-stress Tensor Characteristics in Optimizing the Azimuth of Underground Cavern	 LU Bo, ZHANG Yufeng, WU Aiqing, DONG Zhihong	54
Researches on Synergistic Effect and Mechanism of Pile-slurry for Reinforcement of Fissure Grouting in Earthen Sites	 CUI Kai, WANG Xiaohai, CHEN Wenwu, FENG Fei, CHENG Fuqiang	66
Constitutive Relation with Double Yield Surfaces of Expansive Soil Improved by Lime and Flyash Subjected to Wetting-drying Cycles	 DENG Yunye, WEN Changping	75
Generation of Pore Pressure and Three-dimensional Deformation Behavior of Soft Clay with Different Initial State Under Combined Principal Stress Rotation	WANG Yuke, HUANG Wenqing, WAN Yongshuai, YU Xiang, HAN Musen, GUO Chengchao	84
Upper Bound Limit Analysis of Limit Support Pressure for Shield Excavation Face in Composite Ground	DAI Zhonghai, HU Zaiqiang	95
Effects of Adding Sewage Sludge Ash on the Strength of Ordinary Portland Cement Concrete and Recycled Aggregate Concrete	 SHI Xiaoshuang, ZHANG Kuanyu, LUAN Chenchen, DAI Jinxin, YANG Fuhua	103
Experimental Study on the Interface Shear Behavior of Clay and Cement Soil	 XU Fang, CHEN Le, ZHAO Chunyan, YE Xinyu, LANG Feng, LENG Wuming	110
Bond Strength Prediction Model of the Near-surface-mounted Fiber-reinforced Polymer Concrete Based on Gene Expression Programming	 ZHANG Ruiliang, XUE Xinhua	118

· INTERNET OF THINGS ·

Topology Optimization Algorithm Based on Optimal Rigid Sub-graph for Potential-game Wireless Sensor Networks	 WEI Liansuo, HAN Jian, JIN Tao, SU Yang, GUO Yuan	125
Link Prediction Based on Learning Automaton and Firefly Algorithm	SHU Jian, LI Ruirui, XIONG Tao, LIU Linlan, SUN Limin	133

· INFORMATION ENGINEERING ·

Vehicle Trajectory Extraction Method Using Distributed Optical Acoustic Sensing	 WANG Maoning, LI Zhongqi, ZHANG Jianwei, ZHONG Yuzhong	141
---	--	-----

· CHEMICAL ENGINEERING & MATERIAL ENGINEERING ·

Numerical Simulation of Hydrogen Desorption Characteristics in Metal Hydride Reactor for Hydrogen Storage	 BAO Zewei, ZHU Zezhi, MOU Xiaofeng, YAN Dong	151
Isolation and Identification of Chemical Constituents from <i>Stahlianthus Involucratus</i>	MA Lifang, LI Yan, CHEN Kai, WANG Lun	158
Comparative Study on the Aerobic Granular Sludge Cultivation and Pollutant Removal Under Two Different Operation Modes	 HUANG Jiansheng, GUO Yinying, LIU Deshao, CHEN Shuangkou, CHEN Qiuzhu, WEN Xin, ZHENG Haotian, TAN Junfeng, TANG Qian	164

· MECHANICAL ENGINEERING ·

Numerical Study on the Internal Flow Fluid of the Gas-Liquid Separation Unit in a New Skid-mounted Device with Gas-Liquid Separation and Flash Distillation	MA Hongqiang, WANG Li, HOU Caiqin, HAN Xilian, LUO Xinmei, LI Shaoyong	171
Non-Hertzian Contact Stress Calculation of High-speed Ball Screw Mechanism	 WANG Min, SUN Tiawei, DONG Zhaoyang, KONG Deshun, GAO Xiangsheng	178
Dynamic Analysis of Adaptive Shifting Mechanism of Roller Flat Disk Traction-type Continuously Variable Transmission	 LI Chao, YAO Jin, LI Hua, HU Bo	187
Optimization of Laser Processing Technology for Dry Gas Seal Spiral Groove based on ACE Method	 MAO Wenyuan, SONG Pengyun, DENG Qiangguo, XU Hengjie, SUN Xuejian	195