

JOURNAL
OF SICHUAN UNIVERSITY

ISSN 1009-3087
CN51-1596/T
CODEN SXGKFI

四川大学学报

工程科学版

Engineering Science Edition

2016 4

第48卷 第4期

Vol.48 No. 4

· 水利与土木工程 ·

山区小流域梯级开发的水温累积影响研究	邓云,张棚,脱友才,李云辉,黄文典	1
四川省典型种植制度下农业干旱风险研究	崔宁博,赵璐,胡笑涛,龚道枝	8
基于 ArcGIS 的区域饱和-非饱和点源氮素污染模型及应用	朱焱,刘琨,叶明,史良胜,王丽影,杨金忠	17
水库坝前水温结构日变化规律研究	魏浪,安瑞冬,常理,韩仕清,李克锋	25
金沙江下游梯级水库群多目标兴利调度模型及应用	张睿,张利升,王学敏,王永强	32
堰塞坝溃口下切过程试验研究	蒋先刚,崔鹏,王兆印,衡武浩	38
邻近水体多层地基深基坑整体稳定分析	蒋泽锋,朱大勇,王小金	45
改良高液限黏土水稳定性试验研究	李秉宜,宣剑裕,郑文斌,胡竹炉,徐锴,陈永辉,王雅茹	54
泥石流作用下砌体房屋破坏机理与结构优化	雷雨,崔鹏,蒋先刚	61
T 形钢管混凝土组合柱-钢筋混凝土梁外伸端板连接节点抗震性能试验研究	彭忠,戴绍斌,刘记雄,张逸超	70
大跨悬索桥主缆-吊杆-钢箱梁一体模型疲劳试验研究	曾勇,渠昱,谭红梅,顾安邦	78
纤维编织网增强混凝土加固混凝土柱轴压性能的研究	尹世平,彭驰,艾珊霞	85
偏心支撑钢框架抗地震倒塌富余度研究	齐永胜,顾强	93

· 信息工程 ·

基于置信度的深度图融合	刘怡光,董鹏飞,李杰,都双丽	101
基于分数阶微分、水平集及分水岭的铅锌浮选图像分割	王卫星,白明辉	107
数字图像的局部分数阶微分增强	陈庆利,黄果,门涛,张秀琼,秦洪英,王明蓉	115
改进的安全策略评价管理决策图	罗霄峰,罗万伯	123
基于向量地址的数据中心网络数据面模型的研究	于洋,梁满贵,王哲	129
一种基于 Hadoop 的大规模 Internet 频繁闭图挖掘算法	张岩庆,陆余良,杨国正,朱凯龙	136
基于同态加密的可验证隐私数据聚合方案	王会勇,冯勇	144
基于隐朴素贝叶斯模型的链接预测算法	黄宏程,魏青,胡敏,冯榆斌	150
模拟集成电路故障诊断与参数辨识的代数方法	周启忠,谢永乐	158
基于映射矩阵的多目标交换式以太网拓扑优化	李杰林,陈明,陈德基	167
基于大气消光系数和引导滤波的浓雾图像去雾算法	龙伟,傅继贤,李炎炎,夏玉琪,杨国涛	175

· 电气工程 ·

基于响应事件工艺参数免疫时间的设备电压暂降敏感特征识别	汪颖,李成鑫,李国栋,李锴科	181
-----------------------------	----------------	-----

· 机械工程 ·

面向服务架构的工艺创新设计	王晨,赵武,王杰,陈领	188
材料填充对开槽轴承接触力与润滑性能的影响	吴继强,王家序,蒲伟,曹伟,张莹,吴会超	197
准系统数值解法在混合热弹性流体动压润滑中的运用	王骁鹏,王家序,李文广,何涛,蒲伟	204
残余应力及其表征参数对材料滚动接触性能的影响	杨荣松,陈鹏飞,王家序,周青华	211
面向大曲率组合曲面的喷涂机器人喷枪轨迹组合与连接问题研究	张鹏,樊俊,宁会峰,李玉洋,魏丽娜	217

· HYDRAULIC & CIVIL ENGINEERING ·	
Study on Water Temperature Cumulative Effects of Cascade Hydropower Stations in a Mountain River	DENG Yun, ZHANG Peng, TUO Youcai, LI Yunhui, HUANG Wendian 1
Agricultural Drought Risk Research Under the Typical Cropping Systems in Sichuan Province	CUI Ningbo, ZHAO Lu, HU Xiaotao, GONG Daozhi 8
ArcGIS-based Regional Unsaturated-saturated Nitrogen Contamination and Loading Calculation Software and Its Application	ZHU Yan, LIU Kun, YE Ming, SHI Liangsheng, WANG Liying, YANG Jinzhong 17
Research on Daily Variation of Water Temperature Structure in Front of Dam	WEI Lang, AN Ruidong, CHANG Li, HAN Shiqing, LI Kefeng 25
Model and Application of Multi-objective Beneficial Dispatch for Cascade Reservoirs in Jinsha River	ZHANG Rui, ZHANG Lisheng, WANG Xuemin, WANG Yongqiang 32
Experiments Investigation on Longitudinal Breaching of Natural Dam	JIANG Xiangang, CUI Peng, WANG Zhaoyin, HENG Wuhao 38
Integral Stability Analysis of Deep Foundation Pit in Multilayered Formation Close to River	JIANG Zefeng, ZHU Dayong, WANG Xiaojin 45
Experimental Study on Water Stability of Improved High Liquid Limit Clay	LI Bingyi, XUAN Jianyu, ZHENG Wenbin, HU Zhulu, XU Kai, CHEN Yonghui, WANG Yaru 54
Failure Mechanism and Structure Optimization of Masonry Building Due to Debris Flow Impact	LEI Yu, CUI Peng, JIANG Xiangang 61
Experimental Research on Seismic Performance of Extended-end-plate Connecting Joint Between T-shaped Concrete-filled Steel Tubular Composite Column and Reinforced Concrete Beam	PENG Zhong, DAI Shaobin, LIU Jixiong, ZHANG Yichao 70
Fatigue Experimental Study on Integration Model Including Main Cable, Hangers and Box Main Girder of Long-span Suspension Bridge	ZENG Yong, QU Yu, TAN Hongmei, GU Anbang 78
Research on the Axial Compression Properties of Concrete Columns Strengthened with Textile Reinforced Concrete	YIN Shiping, PENG Chi, AI Shanxia 85
Research on Seismic Collapse Margin Ratio of EBSF System	QI Yongsheng, GU Qiang 93
· INFORMATION ENGINEERING ·	
Fusion of Depth Maps with Confidence of Points	LIU Yiguang, DONG Pengfei, LI Jie, DU Shuangli 101
Flotation Image Segmentation by Combining Fractional Differential, Improved Level Set and Watershed	WANG Weixing, BAI Minghui 107
Local Fractional Differential Algorithm for Image Enhancement	CHEN Qingli, HUANG Guo, MEN Tao, ZHANG Xiuqiong, QIN Hongying, WANG Mingrong 115
Improved Decision Diagrams for Security Policy Evaluation and Management	LUO Xiaofeng, LUO Wanbo 123
Research on Data Center Network Data Plane Model Based on Vector Address	YU Yang, LIANG Mangui, WANG Zhe 129
A Frequent Closed Graph Mining Algorithm in Large Scale Internet Based on Hadoop	ZHANG Yanqing, LU Yuliang, YANG Guozheng, ZHU Kailong 136
A Verifiable Private Data Aggregation Scheme Based on Homomorphic Encryption	WANG Huiyong, FENG Yong 144
Links Prediction Based on Hidden Naive Bayes Model	HUANG Hongcheng, WEI Qing, HU Min, FENG Yubin 150
Algebraic Methodology on Fault Diagnosis and Parametric Identification for Analog Integrated Circuits	ZHOU Qizhong, XIE Yongle 158
Multi-objective Optimization of Switched Ethernet Topology Based on Mapping Matrix	LI Jielin, CHEN Ming, CHEN Deji 167
Algorithm About Dense Fog Image Dehazing Based on Atmospheric Extinction Coefficient and Guided Filtering	LONG Wei, FU Jixian, LI Yanyan, XIA Yuqi, YANG Guotao 175
· ELECTRICAL ENGINEERING ·	
Sensitive Characteristic Identification of Voltage Sag Based on Equipment Response Event and Process Parameter Immunity Time	WANG Ying, LI Chengxin, LI Guodong, LI Kaike 181
· MECHANICAL ENGINEERING ·	
Approach for Process Innovative Design Based on SOA	WANG Chen, ZHAO Wu, WANG Jie, CHEN Ling 188
Effect of Fillers on Contact Force and Lubrication Performance of Slotting Bearing	WU Jiqiang, WANG Jiaxu, PU Wei, CAO Wei, ZHANG Ying, WU Huichao 197
Accurate System Numerical Method For Solving the Mixed Thermal Elastic Hydrodynamic Lubrication	WANG Xiaopeng, WANG Jiaxu, LI Wenguang, HE Tao, PU Wei 204
Effects of Residual Stress and Its Characterization Parameters on Rolling Contact Performance of Materials	YANG Rongsong, CHEN Pengfei, WANG Jiaxu, ZHOU Qinghua 211
Study on Trajectory Combination and Connection Problems of Spray-painting Robot for Large Curvature Combination Surfaces	ZHANG Peng, GONG Jun, NING Hui Feng, ZENG Yong, LIU Yaju, WEI Lina 217

《四川大学学报(工程科学版)》编辑委员会

Editorial Committee of Journal of Sichuan University (Engineering Science Edition)

主任委员 Chairman: 徐 僊 XU Xi

副主任委员 Vice Chairman: 涂铭旌 TU Mingjing 谢和平 XIE Heping 石 碧 SHI Bi

委 员 Members (以姓氏笔划为序):

王 琪 WANG Qi	王清远 WANG Qingyuan	王家序 WANG Jiaxu
石 碧 SHI Bi	朱家骅 ZHU Jiahua	许唯临 XU Weilin
李 涛 LI Tao	李光宪 LI Guangxian	李 彦 LI Yan
李 嘉 LI Jia	刘俊勇 LIU Junyong	余海岁 YU Haisui
杨 蓓 YANG Bei	杨红雨 YANG Hongyu	张凌之 ZHANG Lingzhi
赵世平 ZHAO Shiping	侯正猛 HOU Zhengmeng	徐 僊 XU Xi
涂铭旌 TU Mingjing	顾 宜 GU Yi	殷国富 YIN Guofu
黄卫星 HUANG Weixing	曹叔尤 CAO Shuyou	章 毅 ZHANG Yi
梁 斌 LIANG Bin	傅 强 FU Qiang	谢和平 XIE Heping

本刊

- 被《工程索引(EI)》收录
- 被《Scopus》收录
- 被《化学文摘(CA)》收录
- 被《剑桥科学文摘(CSA)》收录
- 被《文摘杂志(PJK)》收录
- 被《日本科学技术社数据库》收录
- 被《INSPEC 数据库》收录
- 为《中文核心期刊要目总览》核心期刊
- 为《中国科学引文数据库(CSCD)》核心期刊
- 为《中国科技论文与引文数据库(CSTPCD)》统计源期刊(中国科技核心期刊)
- 被《中国期刊网》《中国学术期刊(光盘版)》全文收录
- 被《中国学术期刊文摘数据库核心版(CSAD-C)》收录
- 被评为“RCCSE 中国权威学术期刊”

四川大学学报(工程科学版)

SICHUAN DAXUE XUEBAO (GONGCHENG KEXUE BAN)

JOURNAL OF SICHUAN UNIVERSITY

(ENGINEERING SCIENCE EDITION)

(公开发行·双月刊)

创刊年 1957

第48卷 第4期 2016年7月出版

(Public Distribution • Bimonthly)

Started in 1957

Vol.48 No.4 July 2016

主管单位 国家教育部

主办单位 四川大学

编辑出版 《四川大学学报(工程科学版)》编辑部

地 址 成都市一环路南一段24号

电 话 028-85401005 邮编 610065

http://jsuese.scu.edu.cn E-mail jsu@scu.edu.cn

荣誉主编 徐 僊 院士

主 编 谢和平 院士

常务副主编 张凌之 编审

国内订购 全国各地邮局(代号62-55)

国内发行 四川省报刊发行局

国外发行 中国国际图书贸易集团有限公司
(北京399信箱 国外代号Q544)

印刷装订 成都市锦慧彩印有限公司

装帧设计 米茄设计工作室

Sponsored by

Sichuan University

Edited and Published by

Editorial Department of Journal of Sichuan University
(Engineering Science Edition)

Address

No.24, South Section 1, 1st Ring Road
Chengdu, Sichuan, 610065, China

Tel: +86 28 85401005 Fax: +86 28 85401005

Chief Editor

Professor XIE Heping

Issued Overseas by

Chinese International Book Trading Company
(P. O. Box 399, Beijing, China)
(International Code: Q544)



刊号: ISSN 1009-3087
CN 51-1596/T

国内定价 20.00 元

ISSN 1009-3087



9 771009 308169