

# 土木建筑与环境工程

第33卷 第1期 2011年2月

## 目次

### 土木工程

- 混凝土内部应变分布式光纤实时检测方法及其试验研究 ..... 金伟良,毛江鸿,何勇(1)
- 收缩裂缝对混凝土氯离子渗透及碳化的影响 ..... 金祖权,侯保荣,赵铁军,等(7)
- 多因素作用下钢筋混凝土构件氯离子扩散系数模型 ..... 滕海文,舒正昌,黄颖,等(12)
- FRP加固钢筋混凝土圆柱侧向变形能力研究 ..... 顾冬生,吴刚,吴智深,等(17)
- 火灾下钢筋混凝土墙计算模型及影响因素分析 ..... 郑永乾,蔡雪峰(24)
- 混凝土随机冻融损伤三维预测模型 ..... 张峰,李术才,李守凯(31)
- 大跨混凝土箱梁温度场分析 ..... 张亮亮,杨磊,杨转运,等(36)
- 多塔下拉索斜拉桥静力荷载试验和计算分析 ..... 肖明葵,王肖巍,刘纲(43)
- 变曲率摩擦摆隔震支座理论分析与数值模拟 ..... 邓雪松,龚健,周云(50)
- 土与混凝土接触面反向单剪本构模型 ..... 王伟,卢廷浩,周爱光(59)
- 群桩基础非线性有限元强度折减法极限分析 ..... 董天文,郑颖人,黄连社(65)
- 应变历史对黏土剪切模量和阻尼比的影响 ..... 熊伟,尚守平,王海东,等(71)
- 碾压混凝土重力坝的广义损伤可靠度及敏感性 ..... 王亚军,张我华,张楚汉,等(77)
- 加装采风口增强通风管路堤的降温效果 ..... 杨丽君,孙斌祥,杨秋伟,等(87)
- 岩爆预测的最大熵最优相对隶属度方法 ..... 曾杰,张永兴,靳晓光(93)

### 暖通工程与建筑物理

- 高层建筑“走廊—前室缓冲区”防火效果的数值分析 ..... 何嘉鹏,李静娴,周汝,等(98)
- 江水源热泵尾水排放方式优选试验研究 ..... 卿晓霞,崔相楠,周健,等(105)
- IDC机房用热管换热器节能特性试验研究 ..... 周峰,田昕,马国远(111)

### 市政与环境工程

- A/A/O氧化沟流态特性研究及积泥分析 ..... 李柏林,张智,刘少武,等(118)
- 溶氧状况对美人蕉根系特征和畜禽废水处理效果的影响 ..... 范子红,刘超翔,于鑫,等(124)
- 表面活性剂对CuO/TiO<sub>2</sub>结构和光催化活性的影响 ..... 徐璇,吉芳英,何莉(129)
- 臭氧/紫外协同作用处理腈纶废水 ..... 安鹏,徐晓晨,杨凤林,等(135)
- 反硝化过程中亚硝酸盐积累特性分析 ..... 葛士建,王淑莹,杨岸明,等(140)
- TISTD反应器中的菌群结构及生态变化 ..... 叶美瑜,丁维,何强,等(147)

本期栏目主持人: 黄宗明 张永兴 付祥钊 郑怀礼

本期执行编辑: 胡英奎 编辑: 王秀玲 胡玲 胡英奎 英文校译: 刘猛

期刊基本参数: CN 50-1198/TU \* 1957 \* b \* A4 \* 152 \* zh \* P \* ¥10.00 \* 1100 \* 24 \* 2011-2

# Journal of Civil, Architectural & Environmental Engineering

Vol. 33 No. 1 Feb. 2011

## CONTENTS

### Civil Engineering

- Experimental Analysis on Real-time Distributed Strain Measurement in Concrete ..... JIN Wei-liang, MAO Jiang-hong, HE Yong( 1 )
- Influence of Shrinkage Cracks on Chloride Penetration and Carbonation of Concrete  
..... JIN Zu-quan, HOU Bao-rong, ZHAO Tie-jun, et al( 7 )
- Chloride Ion Diffusion Coefficient Model of R. C. Elements under Multiple Factors  
..... TENG Hai-wen, SHU Zheng-chang, HUANG Ying, et al( 12 )
- Deformation Capacity of FRP Confined Reinforced Concrete Circular Columns under Simulated Seismic Loading  
..... Gu Dong-sheng, WU Gang, WU Zhi-shen, et al( 17 )
- Computational Model and Influencing Factor Analysis of Reinforced Concrete Walls under Fire ..... ZHENG Yong-qian, CAI Xue-feng( 24 )
- Three-dimensional Random Damage Prediction Model of Concrete Caused by Freeze-thaw ..... ZHANG Feng, LI Shu-cai, LI Shou-kai( 31 )
- Temperature Field Analysis of Long-span Concrete Box Girders  
..... ZHANG Liang-liang, YANG Lei, YANG Zhuan-yun, et al( 36 )
- Static Load Test and Calculation on Multi-tower Cable-Stayed Bridge with Tie-down Cables  
..... XIAO Ming-kui, WANG Xiao-wei, LIU Gang( 43 )
- Theoretical Analysis and Numerical Simulation of Variable Curvature Friction Pendulum Isolation Bearing  
..... DENG Xue-song, GONG Jian, ZHOU Yun( 50 )
- Constitutive Model for Negative Simple-sheared Soil-concrete Interface ..... WANG Wei, LU Ting-hao, ZHOU Ai-zhao( 59 )
- Strength Reduction Method of Non-linear FEM Limit Analysis for Pile Group Foundation  
..... DONG Tian-wen, ZHENG Ying-ren, HUANG Lian-zhuang( 65 )
- Effects of Vibration History on Modulus and Damping of Clay ..... XIONG Wei, SHANG Shou-ping, WANG Hai-dong, et al( 71 )
- Generalized Damage Reliability and Sensitivity Analysis on Rolled-Concrete Gravity Dam  
..... WANG Ya-jun, ZHANG Wo-hua, ZHANG Chu-han, et al( 77 )
- Cooling Capability of Duct-ventilated Highway Embankment Enhanced by Self-windward Vent  
..... YANG Li-jun, SUN Bin-xiang, YANG Qiu-wei, et al( 87 )
- Prediction of Rock Burst using the Method of Optimal Relative Membership Degree Based on the Maximum Entropy Principle  
..... ZENG Jie, ZHANG Yong-xing, JIN Xiao-guang( 93 )

### HVAC Engineering and Building Physics

- Simulation of Evacuating Buffer in High-rise Building Fires ..... He Jia-peng, Li Jing-xian, Zhou Ru, et al( 98 )
- Experimental Analysis on Optimal Tail Water Discharge Method of River Water Source Heat Pump  
..... QING Xiao-xia, CUI Xiang-nan, ZHOU Jian, et al(105)
- Energy-Saving Performance of Thermosyphon Heat Exchanger Applied in Internet Data Center  
..... ZHOU Feng, TIAN Xin, MA Guo-yuan(111)

### Municipal & Environmental Engineering

- Sludge Deposition Analysis and Flow Pattern Test on Oxidation Ditch Integrated A/A/O Technique  
..... LI Bo-lin, ZHANG Zhi, LIU Shao-wu, et al(118)
- Effects of Oxygenation on Canna Root Characteristics and Treatment of Swine Waster Water  
..... FAN Zi-hong, LIU Chao-xiang, YU Xin, et al(124)
- Structure and Catalytic Activity of CuO/TiO<sub>2</sub> Modified by Different Kinds of Surfactants  
..... XU Xuan, JI Fang-ying, HE Li(129)
- Treatment of Acrylic Fiber Wastewater by Synergistic Effect of O<sub>3</sub>/UV ..... AN Peng, XU Xiao-chen, YANG Feng-lin, et al(135)
- Analysis of Nitrite Accumulation During Denitrification ..... GE Shi-jian, WANG Shu-ying, YANG An-ming, et al(140)
- Microbial Community Structure and Ecological Variation in TISTD Reactor  
..... YE Jiang-yu, DING Wei, HE Qiang, et al(147)