

目 次

化工与材料工程

- 脱硅稻壳基活性炭对靛蓝吸附性能的研究 韩秀丽, 何玉远, 郭晓峰, 王 锋, 宋阿娟, 赵浩浩(1)
有机硅砖质文物保护剂的制备及性能研究 詹予忠, 何 嶸, 朱小丽, 沈国鹏, 韩 丽, 陈宜俍(6)
凹坑凸胞板式换热器相变换热优化研究 王定标, 董永申, 向 飙, 夏春杰(10)
玉米秸秆厌氧发酵产氢动力学模型的建立及数理验证 孙学习, 凡广生, 任保增, 樊耀亭(14)
SiC 加热元件在 N₂ 气氛下使用损毁机理研究 刘新红, 牛智旺, 周超杰, 王大军, 方岩震, 刘 锚(18)
固体酸 USY 催化纤维素生成乙酰丙酸乙酯的实验研究 孙培勤, 赵世强, 常 春, 陈俊武(22)
Al-Ti-C-Sr 细化剂制备的正交优化及挤压研究 赵红亮, 高 雅, 孙启宴, 翁康荣, 张景超(27)
聚乳酸的 ATRP 引发剂的合成与表征 刘文涛, 唐新颖, 梁雯娜, 夏学莲, 何素芹, 朱诚身(31)
正弦波纹太阳能空气集热器数值模拟分析 李水莲, 马新灵, 魏新利(35)

信息工程

- 基于时延约束的认知链路自适应传输策略研究 穆晓敏, 梁 晓, 赵海峰, 高昊民(39)
一种 MIMO 时间相干信道下的有限反馈新方法 范文兵, 郭 云, 王振义, 孟小超, 季 纲(43)
基于加权小波分解和 Fisherfaces 的人脸识别算法研究 张 震, 李 龙(47)
分布式网络中进度密度的研究 李娜娜, 陈昌海, 甘 勇, 丁汉青(51)
认知无线电中考虑公平性的 OFDMA 资源分配策略 杨守义, 郝万明(55)
基于 FDTD 的钢筋混凝土墙对通信信号衰减研究 杨明珊, 孟小超, 邱志勇, 郭 云(60)
电波传播混合路径循迹的算法研究 周晓平, 吴德佩, 柳朝阳, 杨明珊(65)

电气工程

- 基于 OPC 的化纤长丝卷绕设备监控系统设计与实现 陈铁军, 李华伟(69)
混联型混合动力汽车建模及控制策略研究 龚贤武, 吴德军, 高 闯, 马 建(73)
基于 EMD 和组合模型的太阳黑子时间序列预测 曾庆山, 张晓楠(78)
基于 HORB 的网络化温度控制系统设计与实现 张 谦, 李红军, 温盛军, 王东云(82)
基于 WHAC-E 组合预测模型的短期电力负荷预测 苏士美, 王明霞, 姚 猛, 张建华(86)

土木与交通工程

- 非全充填裂隙的动态变形模量实验研究 陈金刚, 张树勋, 张景飞, 刘雯雯, 陈 娜, 王明辉(90)
基于室内模拟老化试验对沥青性能的研究 许培俊, 刘建飞, 丛培良, 陈拴发(94)
豫中传统石砌房屋典型质量病害成因机理分析 童丽萍, 时 超(98)
沥青组分与黏度的灰关联分析 傅 珍, 延西利, 蔡 婷, 马 峰(102)
公路交通噪声预测模型 FHWA、RLS90 与规范模型的对比 曹丽娜, 尚 勇, 卢林果(106)
高填方涵洞受力特性现场测试及数值模拟研究 赵建斌, 申俊敏, 董立山(111)
滑移和掀起影响集中荷载作用下组合桁架掀起力推导 王俊立, 李 天(116)
基于 SAMI-R 的旧水泥板加铺沥青层力学分析 唐 颖(120)
基于 Insight 和 Fluent 软件的轿车空调风向优化研究 谢金法, 段 冉(124)

JOURNAL OF ZHENGZHOU UNIVERSITY (ENGINEERING SCIENCE)

Vol. 35 No. 3

May 2014

CONTENTS

[Chemical Engineering and Materials Engineering]

- Adsorption Characteristics of Indigo on Activated Carbon Derived from Residue of Desilicication Rice Husk HAN Xiu-li, HE Yu-yuan, GUO Xiao-feng, WANG Duo, SONG A-juan, ZHAO Hao-hao (1)
The Preparation and Performance of Organosilicon Conservancy Agent for Historical Bricks ZHAN Yu-zhong, HE Rong, ZHU Xiao-li, SHEN Guo-peng, HAN Li, CHEN Yi-liang (6)
Optimization Study on Phase-change Heat Transfer of Plate Heat Exchanger with Dimples WANG Ding-biao, DONG Yong-shen, XIANG Sa, XIA Chun-jie (10)
Study on Kinetics Model of Hydrogen Production with Corn Straw by Anaerobic Fermentation SUN Xue-xi, FAN Guang-sheng, REN Bao-zeng, FAN Yao-ting (14)
Damnification Mechanism of SiC Heating Elements Used in N₂ Atmosphere LIU Xin-hong, NIU Zhi-wang, ZHOU Chao-jie, WANG Da-jun, FANG Yan-zhen, LIU Kai (18)
Study on Production of Ethyl Levulinate from Cellulose Catalyzed by Solid Acid USY SUN Pei-qin, ZHAO Shi-qiang, CHANG Chun, CHEN Jun-wu (22)
Preparation of Al-Ti-C-Sr Refiner by Orthogonal Experiment and Extrusion ZHAO Hong-liang, GAO Ya, SUN Qi-yan, WENG Kang-rong, ZHANG Jing-chao (27)
Synthesis and Characterization of Polylactic acid Macromolecular Initiator by ATRP LIU Wen-tao, TANG Xin-ying, LIAW Wen-na, XIA Xue-lian, HE Su-qin, ZHU Cheng-shen (31)
Numerical Simulation on Thermal Performance of Sinusoidal-corrugated Solar Air Collector LI Shui-lian, MA Xin-ling, WEI Xin-li (35)

[Information Engineering]

- Research on Cognitive Link Adaptation Transmission Strategies under Delay Constraint MU Xiao-min, LIANG Xiao, ZHAO Hai-feng, GAO Hao-min (39)
A New Limited Feedback Approach Based on Channel Prediction over Temporally-correlated Channels FAN Wen-bing, GUO Yun, WANG Zhen-yi, MENG Xiao-chao, JI Gang (43)
Face Recognition Algorithm Research Based on Weighted Wavelet Decomposition and Fisherfaces ZHANG Zhen, LI Long (47)
Study of Density of Progress for Distributed Networks LI Na-na, CHEN Chang-hai, GAN Yong, DING Han-qing (51)
Study on the Fairness of OFDMA Resource Allocation Strategy in Cognitive Radio YANG Shou-ji, HAO Wan-ming (55)
Study on Attenuation of Reinforced Concrete Walls on Communication Signals based on FDTD YANG Ming-shan, MENG Xiao-chao, QIU Zhi-yong, GUO Yun (60)
Research on Hybrid Path Tracking Algorithm in Ray Tracing Techniques ZHOU Xiao-ping, WU De-pei, LIU Chao-ying, YANG Ming-shan (65)

[Electrical Engineering]

- Design and Implementation of the Chemical Fiber Filament Winding Equipment Monitoring System Based on the OPC CHEN Tie-jun, LI Hua-wei (69)
Research on Parallel-series Hybrid Electric Vehicle's Modeling and Control Strategy GONG Xian-wu, WU De-jun, GAO Chuang, MA Jian (73)
Sunspots Time-series Prediction Based on EMD and Combination Model ZENG Qing-shan, ZHANG Xiao-nan (78)
HORB Based Networked Temperature Control Design and Implementation ZHANG Qian, LI Hong-jun, WEN Sheng-jun, WANG Dong-yun (82)
Short-term Load Forecasting Based on WHAC-E Combination Model SU Shi-me, WANG Ming-xia, YAO Meng, ZHANG Jian-hua (86)

[Civil Engineering and Construction Engineering]

- Experiment Study on Dynamic Modulus of Deformation of Partly-Filled Fracture CHEN Jin-gang, ZHANG Shu-xun, ZHANG Jing-fei, LIU Wen-wen, CHEN Na, WANG Ming-hui (90)
Research on Asphalt Performance based on the Experiment of Indoor Simulating Aging Test XU Pei-jun, LIU Jian-fei, CONG Pei-liang, CHEN Shuan-fa (94)
Mechanism Analysis of Typical Diseases of Traditional Stone Houses in Central Subregion of Henan Province TONG Li-ping, SHI Chao (98)
Grey Incidence Analysis on Asphalt Component and Viscosity FU Zhen, YAN Xi-li, CAI Ting, MA Feng (102)
Comparison of FHWA, RLS90 and MOT Model for Highway Traffic Noise Prediction CAO Li-na, SHANG Yong, LU Lin-guo (106)
Field Test and Numerical Simulation of Mechanical Characteristic of Culverts under High Embankments ZHAO Jian-bin, SHEN Jun-min, DONG Li-shan (111)
Theoretical Analysis on the Uplifting Force of Composite Truss Under Concentrated Load Considering Interfacial Slip and Uplift WANG Jun-li, LI Tian (116)
Finite Element Analysis of Preventing the Reflective Cracking of Rubber Powder Modified Asphalt Stress Absorbing Layer TANG Ying (120)
Research on Optimization of Car-Air Conditioning Wind Direction Based on Isight and Fluent Software XIE Jin-fa, DUAN Ran (124)