

目次

材料科学与工程

沥青混合料动态响应的试验条件影响及其主曲线研究····· 栗培龙, 饶文字, 冯振刚, 李建阁( 1 )

干湿循环作用下盐分对桥墩混凝土耐久性影响实验研究 ····· 孙增智, 田俊壮, 杨 凯, 张 雷, 陈华鑫( 6 )

铜掺杂  $\text{AlPO}_4\cdot 5$  沸石的合成及湿敏性能研究 ····· 王炉煜, 祝 烨, 高利苹, 徐甲强( 12 )

用于 UV 树脂改性的可溶性聚酰亚胺的制备工艺 ····· 石晓华, 颜少鸽, 张伟婕( 17 )

盆景状 ZnO 的制备及气敏性能研究 ····· 张永辉, 刘春彦, 刘焕桢, 巩飞龙, 李 峰( 23 )

冻融环境下混凝土结构耐久性研究综述····· 郑元勋, 杨培冰, 康海贵( 27 )

考虑含筋率影响的弯矩增大系数计算方法····· 林上顺, 陈宝春( 33 )

端部质量对有无损伤悬臂梁的模态影响分析····· 闫安志, 陶天增, 张振华( 39 )

高速逆流色谱法分离红色西瓜瓢粗提物中番茄红素····· 阮宝玉, 赵文恩( 43 )

计算机与控制

基于 Spark 的并行极速神经网络 ····· 邓万字, 李 力, 牛慧娟( 47 )

OFDMA 系统多业务频谱切换策略的 CPN 建模及性能评价 ····· 陆彦辉, 李兆平, 韩书君, 杨守义( 57 )

混沌调制技术降低无线充电系统 EMI 水平研究 ····· 高金峰, 余 亚, 张旭辉, 司丞坤( 62 )

低碳型 35 kV GIS 的气室电场强度计算及结构优化 ····· 程 显, 王海燕, 闫广超, 焦连曜( 67 )

机械与其它

基于 MATLAB 的汽车线性最优控制主动悬架仿真研究 ····· 刘本学, 蔺超云, 郭沛东, 栗良玉( 72 )

纯电动汽车白车身耐撞性拓扑优化设计方法····· 雷正保, 刘助春, 廖 卓( 77 )

特殊螺纹套管接头柱面/球面密封结构有限元分析 ····· 朱 强, 杜 鹏, 王建军, 秦东晨( 82 )

凹坑型非光滑单元体排列方式对汽车气动阻力影响分析····· 谢金法, 张靖龙( 86 )

变焦相机自标定方法研究····· 赵书俊, 段绍丽, 张晓芳, 李 磊, 刘晓旻( 91 )

CONTENTS

[Materials Science and Engineering]

Influence of Test Conditions on Dynamic Response of Asphalt Mixture and Its Master Curve ..... LI Peilong, RAO Wenyu, FENG Zhengang, LI Jiange (1)

Experimental Study of Effect of Salt on Durability of Bridge Pier Concrete Under Dry-wet Cycle ..... SUN Zengzhi, TIAN Junzhuang, YANG Kai, ZHANG Lei, CHEN Huaxin (6)

Studies on the Synthesis of  $AlPO_4-5$  Zeolite and Its Doping La and Their Application as Quartz Crystal Microbalance Humidity Sensor ..... WANG Luyu, ZHU Ye, GAO Liping, XU Jiaqiang (12)

Preparation Technology of a Soluble Polyimide Used for UV Resin Modification ..... SHI Xiaohua, YAN Shaoge, ZHANG Weijie (17)

Synthesis of Bonsai-like ZnO and Its Gas Sensing Properties ..... ZHANG Yonghui, LIU Chunyan, LIU Huanzhen, GONG Feilong, LI Feng (23)

The Overview of Concrete Structure Durability under the Freeze-thaw Condition ..... ZHENG Yuanxun, YANG Peibing, KANG Haigui (27)

Calculation Method of Moment Enlargement Coefficient Considering Effect of Reinforcement Ratio ..... LIN Shangshun, CHEN Baochun (33)

The Mode Analysis of the Cantilever Beam with Concentrated Mass on Its Free End in the Case of Damage and No Damage ... YAN Anzhi, TAO Tianzeng, ZHANG Zhenhua (39)

Isolation of Iycopene from the Crude Extract of Red Watermelon Flesh by Iigh-speed Counter-current Chromatography ..... RUAN Baoyu, ZHAO Wenen (43)

[Computer and Control Engineering]

Sparked-based Parallel Extreme Learning Machine ..... DENG Wanyu, LI Li, NIU Huijuan (47)

The CPN Modeling and Performance Evaluation about Spectrum Handoff Strategies in OFDMA Multi-service Communication System ..... LU Yanhui, LI Zhaoping, HAN Shujun, YANG Shouyi (57)

Research on Suppressing Electromagnetic Interference Level of Wireless Charging System by Using Chaotic Modulation Technology ..... GAO Jinfeng, YU Ya, ZHANG Xuhui, SI Chengkun (62)

The Electric Field Strength Calculation and Structure Optimization for Low-carbon 35kV GIS Chamber ..... CHENG Xian, WANG Haiyan, YAN Guangchao, JIAO Lianyao (67)

[Mechanical Engineering and Other]

Research of Simulation in the Linear Optimal Control Active Suspension of Vehicle Based on Matlab ..... LIU Benxue, LIN Chaoyun, GUO Peidong, LI Liangyu (72)

Crashworthiness Topology Optimization Method of Pure Electric Car BIW ..... LEI Zhengbao, LIU Zhuchun, LIAO Zhuo (77)

Sealability Analysis of Premium Connection with Cylinder/Sphere Sealing Structure Based on FEM ..... ZHU Qiang, DU Peng, WANG Jianjun, QIN Dongchen (82)

Influence Analysis of Pit-type Non-smooth Elements Arrangement on Aerodynamic Drag of Vehicle ..... XIE Jinfa, Zhang Jinglong (86)

Research on Self Calibration Method of Zoom Camera ..... ZHAO Shujun, DUAN Shaoli, ZHANG Xiaofang, LI Lei, LIU Xiaomin (91)