

常州大学学报(自然科学版)

第 33 卷 第 1 期(总第 136 期)

2021 年 1 月

期刊基本参数:CN 32-1822/N * 1989 * b * A4 * 96 * zh * P * ¥18.00 * 500 * 13 * 2021-01

目 次

材料科学与工程

- 固相合成法制备单官能度纳米粒子 江 力, 黄兴宇, 黄文艳, 薛小强, 杨宏军, 蒋其民, 蒋必彪(1)
丙烷磺酸吡啶𬭩盐在高增量厚径比印花镍网电铸中的应用 王世颖, 许志刚, 王文昌, 陈智栋(9)
工业 CT 在锂离子电池失效分析检测中的应用 刘 娟(15)

化学化工

- 柠檬酸改性金属磷化物对 4,6-二甲基二苯并噻吩加氢脱硫性能
..... 张 磊, 贺黎文, 和法端, 郑世富, 何明阳, 唐天地(20)
脲基嘧啶酮衍生的苯并 21 冠 7 的合成及其主客体行为
..... 肖唐鑫, 周 玲, 魏小艳, 李正义, 孙小强(29)

生物医药工程

- 查尔酮类衍生物的合成及其抑制酪氨酸酶活性评价
..... 姜松周, 吕金鹏, 付 莹, 杨 莹, 许 煌, 宋国强(35)
组织蛋白酶 C 特异性荧光底物的合成和血清学分析应用
..... 刘 杰, 曹志伟, 陆晨曦, 戈 兴, 周晓鹰(41)

机械制造及其自动化

- 高温曲面过冷核态沸腾汽泡演化特性数值研究
..... 纪国剑, 朱志伟, 李佩莹, 郭晶晶, 周 宁, 王政伟(48)
基于 Fluent 动网格技术三维莱洛泵流场分析 李亮亮, 邹 昊, 任 爽, 乔永强, 孙定华(57)

计算机与信息工程

- 基于深度学习特征表示协同过滤算法 宋志理, 胡胜利, 王 峰(62)
基于最小二乘法拟合的 Otsu 快速图像分割方法 徐建东(70)

土木工程

- 富水粉砂地层盾构隧道穿越河流沉降控制 冯晓九, 缪愔斓, 魏 浩, 王 鹏(77)
基于收敛-约束原理的岩质隧道初衬安全系数计算 刘少峰, 刘 云, 苏永华(85)

Journal of Changzhou University(Natural Science Edition)

Vol.33 No.1(Sum No.136)

Jan. 2021

Contents

Materials Science and Engineering

- Fabrication of Mono-Functional Nanoparticles Based on a Solid-Phase Platform JIANG Li,
HUANG Xingyu, HUANG Wenyan, XUE Xiaoqiang, YANG Hongjun, JIANG Qimin, JIANG Bibiao(1)
Application of Pyridinium Propyl Sulfobetaine in Electroforming of Nickel Mesh with High Incremental Aspect Ratio WANG Shiying, XU Zhigang, WANG Wenchang, CHEN Zhidong(9)
Application of Industrial Computed Tomography on the Failure Analysis of Lithium Ion Batteries
..... LIU Juan(15)

Chemistry and Chemical Engineering

- Study of Hydrodesulfurization of 4,6-Dimethyldibenzothiophene over Metal Phosphide Catalysts Modified by Citric Acid
..... ZHANG Lei, HE Liwen, HE Faduan, ZHENG Shifu, HE Mingyang, TANG Tiandi(20)
Synthesis of Ureidopyrimidinone-Linked Benzo-21-Crown-7 and Its Host-Guest Behaviors
..... XIAO Tangxin, ZHOU Ling, WEI Xiaoyan, LI Zhengyi, SUN Xiaoqiang(29)

Biomedical Engineering

- Synthesis of Chalcone Derivatives and Evaluation of Their Inhibition of Tyrosinase Activity ...
... JIANG Songzhou, LYU Jinpeng, FU Ying, YANG Ying, XU Huang, SONG Guoqiang(35)
Synthesis and Serological Analysis of Cathepsin C Specific Fluorescent Substrate
..... LIU Jie, CAO Zhiwei, LU Chenxi, GE Xing, ZHOU Xiaoying(41)

Mechanical Manufacture and Automation

- Simulation of Evolution Characteristics of Supercooled Nucleate Boiling Bubble on High Temperature Curved Surface
..... JI Guojian, ZHU Zhiwei, LI Peiying, GUO Jingjing, ZHOU Ning, WANG Zhengwei(48)
Internal Flow Field of Lylo Pump Based on Fluent
..... LI Liangliang, ZOU Min, REN Shuang, QIAO Yongqiang, SUN Dinghua(57)

Computer and Information Engineering

- Research on Cooperative Filtering Algorithm Based on Deep Learning Feature Representation ...
..... SONG Zhili, HU Shengli, WANG Feng(62)
A Fast Otsu Image Segmentation Method Based on Least Square Fitting XU Jiandong(70)

Civil Engineering

- Study on Settlement Control of Shield Tunnel Crossing River in Water Rich Silt Stratum
..... FENG Xiaojiu, MIAO Yinlan, WEI Hao, WANG Peng(77)
Calculation Method for Safety Factor of Primary Lining of Rock Tunnel Based on Convergence-Confinement Principle LIU Shaofeng, LIU Yun, SU Yonghua(85)