

■ 综述

锂硫电池正极材料研究进展

焦 萌, 张文佳 (825)

水系可充电锂离子电池面临的挑战及解决方法

蒋 珊, 蒋林杰, 李 中, 潘其云 (833)

甲醇水蒸气重整制氢催化剂的研究

莫 帆, 冯品铭, 陶祖珊, 方伟旺, 吕祎壮 (838)

变电站铅蓄电池失效模式及修复技术研究进展

陈传敏, 陈若希, 郁金星, 刘松涛 (842)

■ 研究与设计

● 化学电源

氟化物和硼酸复合包覆对高镍正极性能的影响

褚曼曼, 于 建, 张兴旺 (845)

复合包覆修饰 $\text{Li}_3\text{V}_2(\text{PO}_4)_3$ 改善高电压性能

裴 东, 刘月鹏, 李文升, 刘 攀 (850)

高镍三元正极材料 $\text{LiNi}_{0.82}\text{Co}_{0.15}\text{Mn}_{0.03}\text{O}_2$ 的制备及电化学性能研究

王泽晶, 吴建栋, 沙思森, 卢 辉 (854)

基膜对功率型高电压钴酸锂电池的影响

唐月娇, 刘富亮, 班宵汉, 向 斌 (859)

基于分数阶模型的锂电池 SOC 估计

段双明, 杨耀微 (862)

基于 WD-GRU 的锂离子电池剩余寿命预测

邢子轩, 张 凡, 武明虎, 何浩然 (867)

基于 K 近邻回归的锂离子电池健康状态估计

孙广明, 贾新羽, 陈良亮 (872)

锂离子电池组均衡控制策略研究

谢恩彦, 仲 卫, 陆 飞, 刘 铨 (876)

车载 12 V 锂电池的工作电压预测和预警策略研究

王 攀, 姜 钊, 陈岱岱, 李海威 (881)

双层隔膜对锂硫电池性能的影响研究

杨学兵, 胡晓娜, 孙 旭 (885)

LSM95-8YSZ 阴极的孔隙结构优化及性能研究

谭义勇, 卓亮辉, 王兆林, 郑沁生 (889)

不锈钢纤维毡流场 PEMFC 的性能实验研究

卢广轩, 葛 鹏, 高建平, 张 欢 (894)

PEMFC 电堆水管理技术的阻抗谱分析

陈金奇, 陈 涛, 王泽英, 冯政恒 (898)

质子交换膜燃料电池单电池振动响应分析

温小飞, 陈泽滔, 詹志刚, 邱 阳 (903)

GDC 3D 微通道 LSC214/LSC113 异质结构中温 SOEC 材料制备研究

娄晓明, 王津津, 吴 智, 唐雨晴 (907)

NiFe 基催化剂的制备及其析氧性能研究

瞿子正, 陈俊雪, 李中林, 李义兵 (911)

金属框架材料 ZIF-GIS 基 ZnO 的合成及其电容性能研究

吴欣蓓, 孔志博, 陈思源, 王亚珍 (916)

● 物理电源

晶体硅光伏组件功率特性及衰减评估分析

李铁成, 曾四鸣, 孟 良, 刘志宾 (920)

基于 SSA-DBN 的光伏阵列故障诊断方法

姜 萍, 郭欢欢, 代金超 (925)

基于 TAC-Heric 的光伏并网逆变器拓扑控制研究

古纯松, 陈 众, 谢 辉, 马希永 (930)

● 系统技术

大功率数字脉冲电源分布式控制网络

孙宏杰, 鲁 伟, 陈洪涛 (935)

无人机电源控制器基板有限元分析及设计改进

刘敏娟, 赵骥宇 (939)

高密布局开窗式新型航天电子设备结构设计

李 爽, 梁 芳 (942)

多支路并联电池系统荷电状态均衡控制策略

单立新, 吴 靖, 赵海荣, 高 峰 (945)

■ 产品博览

上海升立机械

(849)

电池行业用原材料目录

(853)

MAIN CONTENTS

Review

- Research progress of cathode materials for lithium-sulfur batteries.....JIAO Meng, ZHANG Wenjia (825)
- Challenges and solutions for aqueous rechargeable lithium ion battery.....JIANG Shan, JIANG Linjie, LI Zhong, PAN Qiyun (833)
- Study on catalysts for hydrogen production from methanol steam reforming.....
.....MO Fan, FENG Pinming, TAO Zushan, FANG Weiwang, LV Yizhuang (838)
- Research progress of failure modes and recovery technology of lead-acid batteries in substations.....
.....CHEN Chuanmin, CHEN Ruoxi, YU Jinxing, LIU Songtao (842)

Research and design

Chemical power sources

- Effect of fluoride and H_3BO_3 dual-coating on performance of high-nickel cathode materials.....
.....CHU Manman, YU Jian, ZHANG Xingwang (845)
- Performance improvement of composite coating modified $Li_3V_2(PO_4)_3$ at high voltage.....
.....PEI Dong, LIU Yuepeng, LI Wensheng, LIU Pan (850)
- Preparation and electrochemical properties of high nickel ternary cathode material $LiNi_{0.82}Co_{0.15}Mn_{0.03}O_2$
.....WANG Zejing, WU Jiandong, SHA Simiao, LU Hui (854)
- Influence of base film on power high-voltage lithium cobalt oxide battery.....
.....TANG Yuejiao, LIU Fuliang, BAN Xiaohan, XIANG Bin (859)
- State of charge estimation of lithium batteries based on fractional model.....
.....DUAN Shuangming, YANG Yaowei (862)
- Remaining life prediction of lithium ion batteries based on WD-GRU.....
.....XING Zixuan, ZHANG Fan, WU Minghu, HE Haoran(867)
- State of health estimation of lithium-ion battery based on K nearest neighbour regression and IC curve.....
.....SUN Guangming, JIA Xinyu, CHEN Liangliang (872)
- Research on balance control strategy of lithium-ion battery pack.....
.....XIE Enyan, ZHONG Wei, LU Fei, LIU Quan (876)
- Research on operating voltage prediction and warning strategy for vehicle 12 V lithium battery.....
.....WANG Pan, JIANG Zhao, CHEN Daidai, LI Haiwei (881)
- Effects of two layers of separator on properties of lithium-sulfur batteries.....
.....YANG Xuebing, HU Xiaona, SUN Xu (885)
- Optimization of pore structure and properties of LSM95-8YSZ cathode.....
.....TAN Yiyong, ZHUO Lianghui, WANG Zhaolin, ZHENG Songsheng (889)
- Experimental study on performance of PEMFC with stainless steel fiber felt as flow field.....
.....LU Guangxuan, GE Peng, GAO Jianping, ZHANG Huan (894)
- Impedance spectrum analysis of water management technology in PEMFC stacks.....
.....CHEN Jinqi, CHEN Tao, WANG Zeying, FENG Zhengheng (898)
- Vibration response analysis of proton exchange membrane fuel cell based on finite element method.....
.....WEN Xiaofei, CHEN Zetao, ZHAN Zhigang, QIU Yang (903)
- Research on electrode with LSC214/LSC113 heterostructure based on GDC 3D micro-channel for IT-SOEC.....
.....LOU Xiaoming, WANG Jinjin, WU Zhi, TANG Yuqing (907)
- Study on preparation of NiFe-based catalyst and its oxygen evolution performance.....
.....QU Zizheng, CHEN Junxue, LI Zhonglin, LI Yibing (911)
- Synthesis of ZnO based on metal organic framework ZIF-GIS and study of its capacitive properties.....
.....WU Xinbei, KONG Zhibo, CHEN Siyuan, WANG Yazhen (916)

Physical power sources

- Power characteristics and degradation evaluation analysis of crystalline silicon photovoltaic modules.....
.....LI Tiecheng, ZENG Siming, MENG Liang, LIU Zhibin (920)
- A fault diagnosis method for photovoltaic array based on SSA-DBN.....
.....JIANG Ping, GUO Huanhuan, DAI Jinchao (925)
- Research on topology control of photovoltaic grid-connected inverter based on TAC-Heric.....
.....GU Chunsong, CHEN Zhong, XIE Hui, MA Xiyong (930)

System technology

- Distributed control network of high-power digital pulse power supply.....
.....SUN Hongjie, LU Wei, CHEN Hongtao (935)
- Finite element analysis and structural design of energy system controller's plate for unmanned aerial vehicle.....
.....LIU Minjuan, ZHAO Jiyu (939)
- High compact layout windowed structure form design for aerospace electronic equipment.....
.....LI Shuang, LIANG Fang (942)
- SOC balance control of multiple DC parallel battery packs in battery energy storage system.....
.....SHAN Lixin, WU Jing, ZHAO Hairong, GAO Feng (945)