

■综述

- 高镍低钴正极材料的研究进展
水系钠离子电池正极材料及电解液研究进展
SOFC 镍基阳极材料抗积碳研究进展
石墨负极修饰改善锂离子电池长贮存性能

吉长印,吕 菲,徐 宁,吴孟涛(1077)
鲁明峻,吕奕菊,李 伟,刘 峰(1081)
杨 霞,王燕超,刘书贤,刘智恩(1088)
郑海山,杨 忠,苏晓倩(1092)

■研究与设计**●化学电源**

- Si@TiO₂复合材料的制备与性能研究
FeCO₃/rGO 复合材料的合成及其储钠性能
YF₃掺杂对 LiNi_{0.88}Co_{0.10}Al_{0.02}O₂单晶正极材料电性能的影响
双层 ePTFE 增强复合质子交换膜的结构及性能研究
三维多孔炭制备及在电容器中应用
锂氟化碳电池空间环境适应性研究
不同操作工况对 PEMFC 性能影响研究
基于相变和液冷耦合的锂电池散热特性研究
不同荷电状态下锂电池的热失控实验研究
磷酸铁锂软包电池模组碰撞挤压安全性实验
液面下负极汇流排腐蚀开裂原因及机理分析
基于损失递推计算的电池组老化轨迹模型研究
GEO 锂离子蓄电池组在轨性能评估
基于 UKF-AUKF 锂电池在线参数辨识和 SOC 联合估计
简化分数阶 AEPF 的锂电池 SOC 估计算法
基于 NARXNN 变工况下锂电池 SOC 间接估计
SOC 累积误差测量不确定度模型建立及分析
锂离子电池贮存特性研究

郑炳河,李新喜,张国庆(1096)
潘启亮,赵建国,姚利花,李 宁,蒋 尚(1100)
裴 东,周双双,李文升,许国峰(1105)
刘曼硕,刘 芳,张雅琳,李海滨(1108)
王九洲,孟 晓,张 洋,张 彬(1112)
米 娟,谢 欣,乔学荣,王九洲,邢鑫磊(1117)
雷 彻,安周建,刘在伦,张 彬(1121)
袁 松,汪怡平,苏楚奇,陶 琦(1127)
潘公宇,薛 磊(1132)
鲁恒飞,朱世淋,田晓薇,何 帆(1136)
单颖会,吴 涛,陈 默,林 双(1139)
李 欣,杨冬梅,栗欢欢,裴 磊(1142)
刘 鹏,章 玄,侯 睿,盛北飞,贺奉平(1147)
卢云帆,邢丽坤,张梦龙,郭 敏(1151)
张宵洋,陈康义,吴新波(1156)
徐 鹏,王 潺,万世斌,但远宏(1161)
林甲深(1167)
刘 芬,李 琴,陈泽琦,周福辉(1172)

●物理电源

- 反式锡基钙钛矿太阳电池性能分析与探讨
基于 Python 的多结电池仿真及其应用
基于交流阻抗图谱法的晶体硅太阳电池性能研究
双面光伏反射聚光发电装置的研究

饶俊慧,甘永进,覃斌毅,蒋曲博(1175)
郭宏亮,薛 超,孙 强,刘如彬(1179)
刘立勇,韩宏伟(1184)
袁全红(1188)

●系统技术

- 高分一号卫星电源分系统设计与在轨应用
箱式储能系统及电热性能
电池组两级环状均衡拓扑及控制策略设计
可用于故障电池切除的电池组均衡电路
基于模糊算法的锂离子电池组主动均衡方法
基于 LM5034 有源钳位正激变换器设计

赵海峰,徐 伟,王志飞,解晓莉,陈杏娜(1192)
罗 军,田刚领,赵佩宏,陈 晨(1195)
李秉宇,杜旭浩,王 磊(1199)
赫英歧,蔡长兴,邵南淞(1204)
吴铁洲,李梓豪(1208)
苏 通,马文超(1213)

■产品博览

- 上海升立机械 (1126)
电池行业用原材料目录 (1146)

MAIN CONTENTS

Review

- Review on high nickel low cobalt cathode material development.....JI Changyin, LV Fei, XU Ning, WU Mengtao(1077)
Research progress of cathode materials and electrolyte for aqueous sodium ion batteries.....LU Mingjun, LV Yiju, LI Wei, LIU Zheng(1081)
Progress on carbon deposition resistance of nickel-based anodes for solid oxide fuel cell.....YANG Xia, WANG Yanchao, LIU Shuxian, LIU Zhien(1088)
Improvement of long-term storage performance of lithium ion batteries by graphite anode modification.....ZHENG Haishan, YANG Zhong, SU Xiaoqian(1092)

Research and design

Chemical power sources

- Study of preparation and properties of Si@TiO₂ composite materials.....ZHENG Binghe, LI Xinxi, ZHANG Guoqing(1096)
FeCO₃/rGO composite material synthesis and properties of sodium storage.....PAN Qiliang , ZHAO Jianguo, YAO Lihua, LI Ning, JIANG Shang(1100)
Effect of YF₃ doping on electrical properties of LiNi_{0.88}Co_{0.10}Al_{0.02}O₂ high nickel single crystal cathode material.....PEI Dong, ZHOU Shuangshuang, LI Wensheng, XU Guofeng(1105)
A study on the structure and performance of double-layer ePTFE reinforced composite proton exchange membrane.....LIU Minshuo, LIU Fang, ZHANG Yalin, LI Haibin(1108)
Preparation of three dimensional porous carbon and its application in supercapacitors.....WANG Jiuzhou, MENG Xiao, ZHANG Yang, ZHANG Bin(1112)
Research on space environmental adaptability of lithium fluoride carbon battery.....MI Juan, XIE Xin, QIAO Xuerong, WANG Jiuzhou, XING Xinlei(1117)
Research about the effects of different operating conditions on PEMFC performances.....LEI Che, AN Zhoujian, LIU Zailun, ZHANG Bin(1121)
Study on heat dissipation characteristics of Li-ion battery based on coupling of phase change materials and liquid cooling.....YUAN Song, WANG Yiping, SU Chuqi, TAO Qi(1127)
Experimental research on thermal runaway of lithium batteries under different charged states.....PAN Gongyu, XUE Lei(1132)
Test of crash extrusion safety of LFP pouch cell module.....LU Hengfei, ZHU Shilin, TIAN Xiaowei, HE Fan(1136)
Cause and mechanism analysis of corrosion cracking of negative bus-bar under liquid surface.....SHAN Yinghui, WU Tao, CHEN Mo, LIN Shuang(1139)
Aging prediction for battery pack based on loss recursive calculation.....LI Xin, YANG Dongmei, LI Huanhuan, PEI Lei(1142)
On-orbit performance evaluation of GEO lithium ion battery.....LIU Peng, ZHANG Xuan, HOU Rui, SHENG Beifei, HE Fengping(1147)
Online parameter identification and joint SOC estimation of lithium batteries based on UKF-AUKF.....LU Yunfan, XING Likun, ZHANG Menglong, GUO Min(1151)
SOC estimation algorithm of lithium battery based on simplified fractional order AEPF.....ZHANG Xiaoyang, CHEN Kangyi, WU Xinbo(1156)
Li-ion battery SOC indirect estimation under varying working profile based on NARX neural network.....XU Peng, WANG Chan, WAN Shabin, DAN Yuanhong(1161)
Establishment and analysis of measurement uncertainty of SOC cumulative error measurement model.....LIN Jiashen(1167)
Study of storage characteristics of Li-ion battery.....LIU Fen, LI Qin, CHEN Zeqi, ZHOU Fuhui(1172)

Physical power sources

- Performance analysis and discussion of trans-tin-based perovskite solar cells.....RAO Junhui, GAN Yongjin, QIN Binyi, JIANG Qubo(1175)
Python-based simulation and application in multijunction solar cell researches.....GUO Hongliang, XUE Chao, SUN Qiang, LIU Rubin(1179)
Performance study of crystalline silicon solar cells based on AC impedance analysis.....LIU Liyong, HAN Hongwei(1184)
Reserch on the bifacial PV reflective concentrating module.....YUAN Quanhong(1188)

System technology

- Design and in-orbit application of power subsystem for GF-1 satellite.....ZHAO Haifeng, XU Wei, WANG Zhifei, XIE Xiaoli, CHEN Xingna(1192)
Containerized energy storage system and electro-thermal characteristics.....LUO Jun, TIAN Gangling, ZHAO Peihong, CHEN Chen(1195)
Design of two stage ring equalization topology of battery pack and control strategy.....LI Bingyu, DU Xuhao, WANG Lei(1199)
Battery pack equalization circuit capable of being used for fault battery removal.....HE Yingqi, CAI Changxing, SHAO Nansong(1204)
Active equalization method for lithium ion battery pack based on fuzzy algorithm.....WU Tiezhou, LI Zihao(1208)
Design of active clamp forward converter based on LM5034.....SU Tong, MA Wenchao(1213)