Hu Jianjun Large Capacity Energy Storage

In the study of HEV"s energy management strategy, Pontryagin"s minimum principle (PMP) was used to do some optimization, which reduced the working frequency of battery by adjusting battery life ...

The energy management strategy of battery/supercapacitor (SC) hybrid energy storage system (HESS) was studied in Song et al.; 7 this research was taken battery capability ...

Jianjun Jiang, Jiantao Han,* and Yunhui Huang DOI: 10.1002/aenm.201702856 and electric vehicles. However, safety haz-ards and limited lithium resources hinder using LIBs for large-scale energy-storage

Furthermore, a dual-insertion full cell on the cathode and NaTi2(PO4)3 anode delivers reversible capacity of ?110 mA h g-1 at a current rate of 1.0 C without capacity fading over 300 cycles, showing promise as a high-performance SIB for ...

Jianjun WANG, Professor | Cited by 5,896 | of Chinese Academy of Sciences, Beijing (CAS) | Read 193 publications | Contact Jianjun WANG

Grid-level large-scale electrical energy storage (GLEES) is an essential approach for balancing the supply-demand of electricity generation, distribution, and usage. Compared with conventional energy storage methods, battery technologies are desirable energy storage devices for GLEES due to their easy modularization, rapid response, ...

Geothermal energy has become one of the new energy sources of great concern due to its wide distribution, abundant reserves and green, clean and renewable advantages.

DOI: 10.1039/d3ta07304a Corpus ID: 266394136; Enhancing the reversible capacity and cycling stability of sodium cathode materials by Li+ reversible migration @article{Li2024EnhancingTR, title={Enhancing the reversible capacity and cycling stability of sodium cathode materials by Li+ reversible migration}, author={Xingyu Li and ...

Energy, 2019,180:714-727. Jianjun Hu, Xiyuan Niu, Xingyue Jiang,Guoqiang Zu. Energy management strategy based on driving pattern recognition for a dual-motor battery electric vehicle [J]. International Journal of Energy Research, 2019, 43(8): 3346-3364. ... Jianjun Hu, Zihan Guo, Hang Peng, et al. Research on regenerative braking control ...

Sodium-ion batteries, because of their sustainability and low cost, provide an attractive alternative to Li-ion technology for large-scale energy storage. However, their applicability still faces a large challenge due to the lack of high energy density and cycling-stable Na-based positive materials. Here, we Journal of Materials Chemistry A HOT Papers

Hu Jianjun Large Capacity Energy Storage

Grid-level large-scale electrical energy storage (GLEES) is an essential approach for balancing the supply-demand of electricity generation, distribution, and usage. Compared with conventional energy ...

Renewable energy can effectively cope with resource depletion and reduce environmental pollution, but its intermittent nature impedes large-scale development. Therefore, developing advanced technologies for energy storage and conversion is critical. Dielectric ceramic capacitors are promising energy storage technologies due to their ...

DOI: 10.1016/j.ensm.2023.102951 Corpus ID: 261488647; In-Situ Constructed Protective Bilayer Enabling Stable Cycling of LiCoO2 Cathode at High-Voltage @article{Zhang2023InSituCP, title={In-Situ Constructed Protective Bilayer Enabling Stable Cycling of LiCoO2 Cathode at High-Voltage}, author={Hao Zhang and Yuxiang Huang ...

In article number 1702856, researchers from Huazhong University of Science and Technology, Jiantao Han and co-workers, report the fabrication of a high rate and long life dual-insertion sodium-ion full cell that shows no noticeable capacity fading over 300 cycles. The fabrication utilizes high quality ternary-metal Prussian blue analogues with large ...

We at ACS Energy Letters are excited to hear the award of the 2019 Nobel Prize goes to John B. Goodenough, M. Stanley Whittingham, and Akira Yoshino for their pioneering contribution to Li-ion batteries (LIBs). Their ...

Introduction. Energy is a key element of human social, economic development and the lifeblood of industrial production. For centuries, traditional fossil energies such as oil, coal, and natural gas have become increasingly exhausted, and the energy problems for human survival in the future have become increasingly severe, ...

1. Introduction1.1. Background. Energy saving and emission reduction in automobiles are long-term trends in the development of the transportation industry, and new energy vehicles are significant for promoting low-carbon and energy-saving development [1, 2].Due to the larger battery capacity and the ability to be charged through the power ...

Jianjun Hu"s 74 research works with 2,853 citations and 10,417 reads, including: Thermodynamic, economic, environmental analysis and multi-objective optimization of a ...

In order to study the thermal runaway characteristics of the lithium iron phosphate (LFP) battery used in energy storage station, here we set up a real energy storage prefabrication cabin environment, where thermal runaway process of the LFP battery module was tested and explored under two different overcharge conditions (direct ...

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Energy storage is a crucial technology to solve the large-scale access to renewable energy and improve the efficiency, security, and economy of conventional power systems and regional energy ...

Ang Hu, Wenqian Zhao, Jinfu Liu, Mingjia Li & Jianjun Wang Bio-Chemical Analysis Team, Korea Basic Science Institute, Cheongju, 28119, South Korea Kyoung-Soon Jang & Mira Choi

Jianjun Hu"s 52 research works with 454 citations and 20,497 reads, including: Study on low-frequency torsional vibration suppression of integrated electric drive system considering nonlinear factors

Furthermore, a dual-insertion full cell on the cathode and NaTi 2 (PO 4) 3 anode delivers reversible capacity of ?110 mA h g -1 at a current rate of 1.0 C without capacity fading over 300 cycles, showing promise as a high-performance SIB for large-scale energy-storage systems. The ultrastable cyclability achieved in the lab and ...

PDF | On Jan 1, 2017, Zhipeng Wu and others published A Novel Control Strategy for Large-Capacity Energy Storage Systems Based on Virtual Synchronous Generator | Find, read and cite all the ...

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Machine Learning Accelerated Discovery of Promising Thermal Energy Storage Materials with High Heat Capacity; ... 2030128 2110033 1905775 NSF-PAR ID: 10358934 Author(s) / Creator(s): Ojih, Joshua; Onyekpe, Uche; Rodriguez, Alejandro; Hu, Jianjun; Peng, Chengxiao ... Machine Learning Accelerated Discovery of Promising ...

Due to the larger battery capacity and the ability to be charged through the power grid, plug-in hybrid vehicles (PHEVs) do not have the same range limitations as pure electric vehicles and have a longer electric-only range than HEVs, making them a current research hotspot [3,4]. ... Jianjun Hu: Writing - original draft, Supervision, Project ...

Semantic Scholar extracted view of "Theoretical and Technological Challenges of Deep Underground Energy Storage in China" by Chunhe Yang et al. ... Semi-analytical assessment of dynamic sealing capacity of underground gas storage: A case of Songliao Basin, Northeastern China. ... ABSTRACT Large-scale energy is often stored ...

Ph.D, Department of Energy, Technical University of Denmark (1993); Professor of Tsinghua University,

China (1998-); Academician of the Chinese Academy of Sciences (2017-); Chief Scientist of ...

Yining Li, Yi Li, Haoxin Li, Yang Gan, Wujie Qiu, Jianjun Liu* Rational design of high reversible capacity in Li-rich disordered rocksalt cathodes. ... Energy Storage Material. 2018, 11, 152-160. ... Zhongbo Hu, Jianjun Liu*, Xiangfeng Liu, "Facet-Dependent Electrocatalytic Performance of Co3O4 for Rechargeable Li-O2 Battery", J. Phys ...

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Thermal energy storage offers numerous benefits by reducing energy consumption and promoting the use of renewable energy sources. Thermal energy ...

High-Capacity Aqueous Potassium-Ion Batteries for Large-Scale Energy Storage. Dawei Su, Dawei Su. Centre for Clean Energy Technology, Faculty of Science, University of Technology Sydney, Broadway, NSW, 2007 Australia. Search for more papers by this author. Andrew McDonagh,

Machine Learning Accelerated Discovery of Promising Thermal Energy Storage Materials with High Heat Capacity. Joshua Ojih,1 Uche Onyekpe,2,3 Alejandro Rodriguez,1 ...

@article{Hu2024ARM, title={A real-time multi-objective optimization method in energy efficiency for plug-in hybrid electric vehicles considering dynamic electrochemical characteristics of battery and driving conditions}, author={Jianjun Hu and Pengxing Zhu and Zijia Wu and Jiaxin Tian}, journal={Journal of Energy Storage}, year={2024}, url ...

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