Xiao feng energy storage

Thermal energy storage can contribute to the reduction of carbon emissions, motivating the applications in aerospace, construction, textiles and so on. ... Lu Y, Xiao X, Zhan Y, et al. Core-sheath paraffin-wax-loaded nanofibers by electrospinning for heat storage. ... Ze Feng. College of Environmental Science and Engineering, Donghua University ...

Feng Xiao Reliable and accurate short-term prediction of wind speed at hub height is very important to optimize the integration of wind energy into existing electrical systems.

Lithium-sulfur (Li-S) batteries, with high theoretical energy density (~2500 Wh kg -1) and the low cost of sulfur (<$150 ton -1), are regarded as one of the most promising successors to lithium-ion batteries [1], [2], [3].The actual energy density of Li-S batteries as implemented to date is however noticeably lower than the theoretical value because of several ...

Feng Xiao. State Key Laboratory of Alternate Electrical Power System with Renewable Energy Sources, North China Electric Power University, Beijing, China. ... distributed controller based on adaptive dynamic programming is proposed to solve the minimum loss problem of flywheel energy storage systems (FESS). We first formulate a performance ...

This paper studies a coordinated rotor speed control of flywheel energy storage matrix systems (FESMS) in the presence of model uncertainties and unknown disturbances. ...

The oxygen reduction reaction (ORR, O 2 + 4H + + 4e - -> 2H 2 O), as a rate-determining step (RDS), plays a vital role in energy storage and conversion devices, including ...

Ionic liquid electrolyte additive regulates the multi-species-insertion titanium sulfide cathode for magnesium batteries.Ahiud Morag, Xingyuan Chu, Christof Neumann, Darius Pohl, Mino Borrelli, Davood Sabaghi, Markus Löffler, Zden?k Sofer, Andrey Turchanin, Minghao Yu, Xinliang Feng.Energy Storage Materials, 53, 2022, 435-443.

ACS Applied Materials & Interfaces, 2016, 8: 2680â^"2687. [15] WANG Gang, ZHANG Jian, YANG Sheng, WANG Faxing, ZHUANG Xiao-dong, MÃoeLLEN K, FENG Xin-liang. Vertically aligned MoS2 nanosheets patterned on electrochemically exfoliated graphene for high-performance lithium and sodium storage [J]. Advanced Energy Materials, 2018, 8: 1702254. [16]

DOI: 10.1016/S0196-8904(01)00010-3 Corpus ID: 94832857; Preparation and performance of shape stabilized phase change thermal storage materials with high thermal conductivity @article{Xiao2002PreparationAP, title={Preparation and performance of shape stabilized phase change

thermal storage materials with high thermal conductivity}, author={Min Xiao and Bo ...

DOI: 10.1016/S1872-5805(23)60777-2 REVIEW Recent developments and the future of the recycling of spent graphite for energy storage applications Ji-Rui Wang1, Da-Hai Yang1, Yi-Jian Xu1, Xiang-Long Hou1, Edison Huixiang Ang2, De-Zhao Wang3, Le Zhang3, Zhen-Dong Zhu3, Xu-Yong Feng1, Xiao-Hui Song1,*, Hong-Fa Xiang1,4,* 1School of Materials Science ...

Introducing interlayer water between reduced graphene oxide (rGO) nanoplatelets can help align these nanoplatelets ().Ti 3 C 2 T x MXene is a 2D material with metallic conductivity, hydrophilicity, and strong mechanical properties (18-27) has been widely used to reinforce composites and prepare free-standing graphene-Ti 3 C 2 T x sheets (26, ...

Therefore, they have shown great potential in electrochemical energy storage (EES) and conversion (EEC). However, in bulk COFs, the defects always impede charge carrier conduction, and the difficulties in reaching deep-buried active sites by either electrons or ions lead to limited performance. ... Xiao Feng. Bo Wang. Fetching data from ...

Cold thermal energy storage can be used to address the unbalanced distribution of electrical energy temporally and spatially by using phase change materials (PCMs). However, these materials face multiple disadvantages, such as phase separation, supercooling, poor heat-conducting performance, etc. Previous literature has revealed that the main approaches to ...

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Liquid air energy storage (LAES) is a promising energy storage system with the main advantage of being geographically unconstrained. The efficiency of LAES could be improved by utilizing compression heat and integration with other systems. As an effective heat recovery process, the Stirling engine (SE) is introduced to the LAES system.

Therefore, they have shown great potential in electrochemical energy storage (EES) and conversion (EEC). However, in bulk COFs, the defects always impede charge carrier conduction, and the difficulties in reaching deep-buried active sites by either electrons or ions lead to limited performance.

Zinc-air batteries deliver great potential as emerging energy storage systems but suffer from sluggish kinetics of the cathode oxygen redox reactions that render unsatisfactory cycling lifespan.

Renewable Energy and Energy Storage. Lan Xiao. 2020-11-06 19:20 :[] Name. Lan Xiao. Department. Renewable Energy . Title. Associate Professor. Contact Information. xiaolannancy@cqu .cn . Biography: ...

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Xiaofeng Tong currently works at the Department of Energy Conversion and Storage, Technical University of Denmark. Xiaofeng does research in Materials Science, Materials Chemistry and ...

Bulk COFs and COF nanosheets for electrochemical energy storage and conversion. Jie Li +, ... Xiao Feng received his BS degree in materials chemistry in 2008 and PhD degree in materials science in 2013 from Beijing Institute of Technology. He pursued his study in Japan as a joint PhD student at the Institute for Molecular Science (2009-2012).

Nickel sulfide-based energy storage materials for high-performance electrochemical capacitors. Ramyakrishna Pothu, Ravi Bolagam, Qing Hong Wang, Wei Ni, Jin Feng Cai, Xiao Xin Peng, Yue Zhan Feng, Jian Min Ma ... Qing Hong Wang, Wei Ni, Jin Feng Cai, Xiao Xin Peng, Yue Zhan Feng, Jian Min Ma. Department of Materials Science and ...