

phase change ???





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Tongtong Shen, Hao Peng, Xiang Ling. Experimental Measurements and Thermodynamic Modeling of Melting Temperature of the Binary Systems n-C11H24???n-C14H30, n-C12H26???n-C13H28, n-C12H26???n-C14H30, and n-C13H28???n-C15H32 for Cryogenic Thermal Energy Storage. High-energy storage graphene oxide modified



However, the low energy storage efficiency and breakdown strength hinder further device miniaturization for energy storage applications. Herein, we design a high configurational ???



Xiang???Xi He's 16 research works with 397 citations and 1,830 reads, including: Pre-Oxidation Strategy Transforming Waste Foam to Hard Carbon Anodes for Boosting Sodium Storage Performance



The corresponding energy and power densities at 0.5???20 C are listed in Supplementary Table 7, indicating that the AKIB outputs an energy density of 80 Wh kg ???1 at a power density of 41 W kg







Synthetic Metals 278 (2021) 116822 Junying Xue, Hongbo Xu, Shen Wang, Tingting Hao, Yu Yang, Xiang Zhang, Ying Song, Yao Li, Jiupeng Zhao sign and synthesis of 2D rGO/NiO heterostructure composites for high-performance electrochromic energy storage.





Gases are widely used as energy resources for industry and our daily life. Developing energy cost efficient porous materials for gas storage and separation is of fundamentally and industrially important, and is one of the most important aspects of energy chemistry and materials. Metal-organic framew ???





The energy supply system is the key branch for fiber electronics. Herein, after a brief introduction on the history of smart and functional fibers, we review the current state of advanced functional fibers for their application in energy conversion and storage, focusing on nanogenerators, solar cells, supercapacitors and batteries.





We achieve an ultrahigh energy density of 152 joules per cubic centimeter with markedly improved efficiency (>90% at an electric field of 3.5 megavolts per centimeter) in ???





Two-dimensional (2D) transition metal oxide composited with graphene has attracted worldwide attention in the energy storage and conversation field. Here, a 2D rGO/NiO heterostructure film on ITO glass was designed and applied to electrochromic energy storage. The 2D heterostructure increases the interlayer spacing of the NiO-based films and the electrochemically active ???





Author links open overlay panel Junying Xue a, Hongbo Xu a, Shen Wang a, Tingting Hao a, Yu Yang a, Xiang Zhang b, Ying Song a, Yao Li b, Jiupeng NiO shows great prospects in electrochromic and energy storage application. To obtain high energy storage performance or electrochromic performance, a large number of rGO/NiO electrode materials



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. The exploration on bifunctional electrocatalysts for oxygen reduction and evolution constitutes a key solution, where rational design strategies to



Hao Xiang. North China Electric Power University. JunTai Xing. Beijing Jiuzun Energy Technology Co., Ltd. Zeqiang Liu. North China Electric Power University environment-friendliness, and sustainability. Including solar collector, heat pump, energy storage equipment and drying chamber, the SAHPD system can be regarded as the integrated



",,,2017~2018????????????????Applied Energy???Energ. Convers. Manage.1"Outstanding Contribution in Reviewing???



Ni(OH)2 nanosheet, acting as a potential active material for supercapacitors, commonly suffers from sluggish reaction kinetics and low intrinsic conductivity, which results in suboptimal energy density and long cycle life. Herein, a convenient electrochemical halogen functionalization strategy is applied for the preparation of mono/bihalogen engineered Ni(OH)2 electrode ???







The sodium ion battery (NIB) is a promising alternative technology for energy storage systems because of the abundance and low cost of sodium in the Earth's crust. However, the limited cycle life a



Author links open overlay panel Hao Qi, Xiang Wang, Hongshan Chen. Show more. Add to Mendeley. Share. Cite. ???253 ?C) storage methods, solid state storage of hydrogen is potentially superior with regard to safety, energy efficiency, and the storage capacity [[3], [4], [5]]. A practical storage system should be able to operate under



KEYWORDS: Metal-organic frameworks, Gas separation, Gas storage, Fuel gas, Membrane INTRODUCTION M odern civilization requires energy to function, giving a worldwide energy consumption about 575 quadri I lion British thermal units (Btu, 1 Btu is about 1.055 kJ or 0.0003 kW- h) in 2015. 1 As important energy sources and energy carriers,



The energy supply system is the key branch for fiber electronics. Herein, after a brief introduction on the history of smart and functional fibers, we review the current state of advanced functional fibers for their application in energy conversion and storage, focusing on nanogenerators, solar cells, supercapacitors and batteries.



Hao Peng's 25 research works with 777 citations and 4,367 reads, including: Study on thermophysical properties of C7~C9 Binary Alkane PCM and preparation of anti-volatile emulsion template for



The eCO 2 RR system cell structure can be summarized into two main categories, 1) two-chamber cell (2-C cell) and 2) GDE cell. Both kinds of CO 2 cell structures have the same mechanism of eCO 2 RR in which water is oxidized to O 2 at the anode, while CO 2 is reduced to



carbon-based species at the cathode, and there is an ion exchange membrane ???





Phase change materials with desirable light-thermal conversion ability are particularly attractive for solar energy harvesting and storage. Herein, we demonstrate that the combination of efficient light-thermal conversion, excellent thermal property, and reliability can be achieved via the construction of a novel form-stable phase change composite material, that is, ???



The energy storage of EDLCs is via charge adsorption at the surface of the electrode without any faradaic reactions. 24, Hao Jiang received his Ph.D. degree in Materials Science and Engineering from East China University of Science and Technology (ECUST), China, in 2009. He then joined Temasek Laboratories, Nanyang Technological University



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Biography Xiang Hao was born in Shaanxi, China, in 1987. He received the B.S. degree in electrical engineering from the Harbin Institute of Technology, Harbin, China, in 2009, and the M.S and Ph.D. degrees in electrical engineering from Xi"an Jiaotong University, Xi"an, China, in 2011 and 2014, respectively.



Xiang Ling; Hao Peng triangular fin was proposed to improve the solidification performance of shell and tube latent heat thermal energy storage (LHTES) device. At first, the solidification