Title: Organic electrochemical energy storage
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The electrochemical properties of organic materials play a critical role in dictating their effectiveness in energy storage devices. These properties, including redox potential, capacity, ...

Organic FBs which employ abundance and structure-tunable organic molecules as redox-active materials provide new pathways to achieve low-cost and high-performance ...

A comparative analysis is provided, evaluating these organic species regarding energy density, power density, and cycling stability, demonstrating the improved performance ...

This Special Collection provides an in-depth look ...

Organic electrode materials (OEMs) possess low discharge potentials and charge-discharge rates, making them suitable for use as affordable and eco-friendly ...

We hope that this Account will make an invaluable contribution to the development of organic electrode materials for next-generation batteries and help to unlock a world of ...

In the past few years, their potential has attracted a great deal of attention for charge storage and transport applications in various electrochemical energy storage devices, and numerous ...

Hydrogen-bonded organic frameworks (HOFs) have recently attracted considerable interest as a distinct and rapidly developing family of porous crystalline materials ...

This Special Collection provides an in-depth look at the rapidly evolving research landscape surrounding electrochemical energy storage technologies based on redox-active ...

Electrochemical energy storage (EES) devices are typically based on inorganic materials made at high temperatures and often of scarce or toxic elements. Organic-based ...

In this article, we focus on the application of organic electrochromic materials in energy storage devices. The

working mechanisms, electrochemical performance of different types of organics ...

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