

Title: Iron sulfate battery

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MS-NFS-110 ($\text{Na}_2\text{Fe}_2(\text{SO}_4)_3$) is a high-voltage sodium iron sulfate designed as a next-generation cathode material for sodium-ion batteries. With a robust polyanionic structure, this material enables ...

This type of battery belongs to the class of redox-flow batteries (RFB), which are alternative solutions to Lithium-Ion Batteries (LIB) for stationary applications.

Over last decades, the iron-based sulfate (IBS) has been extensively studied owing to its numerous advantages, including a large theoretical specific energy (over 100 Wh kg^{-1}), high ...

This review focuses on sodium iron sulfate (NFS) cathodes for sodium-ion batteries, highlighting their stable three-dimensional framework, sodium storage mechanism, and inherent low ...

Sodium iron sulfate (NFSO) is considered to be a promising cathode material due to its stable framework, adjustable structure, operational safety, and the high electronegativity of SO_4^- .

In this review, we summarize the research achievements of iron-based sulfate cathode materials in fundamental research, as well as provide a comprehensive overview of its ...

In this work, multiscale interfaces were successfully integrated in high-voltage iron-based sulfate cathodes to build continuous Na^+ transfer channels at all length scales.

Although sodium iron sulfate (NFSO) as a cathode material for sodium-ion batteries exhibits numerous advantages, such as a high voltage platform, excellent cycling stability, and low cost, it still faces ...

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