
Here, we introduce a micro-patterning strategy that directly integrates flow field architectures into the electrode structure during NIPS fabrication as a potentially scalable ...

Significant differences in performance between the two prevalent cell configurations in all-soluble, all-iron redox flow batteries are presented, demonstrating the critical role of cell architecture in ...

In this study, we synthesized and evaluated a series of zeolitic imidazolate framework-67 (ZIF-67) derivatives as electrode materials for ...

He et al. [35] developed a 3D VRFB model to understand the effects of the electrode"s structural parameters on battery performance.

By exploring innovative electrode designs and functional enhancements, this review seeks to advance the conceptualization and ...

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Using symmetric iron flow cells and all-vanadium full cells, pillar-patterned electrodes, combined with an interdigitated flow field, are shown to significantly reduce mass ...

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Here, we propose a key design strategy that integrates size-confined microphase separation and intrinsic microporosity within a solution-processable Tröger"s base (TB) ...

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RFBs work by pumping negative and positive electrolytes through energized electrodes in electrochemical reactors (stacks), allowing energy to be stored and released as ...

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Integrating electrodes and bipolar plates provides a definitive approach to eliminate contact resistance. This study aims to reduce the cell resistance by reducing the interfacial ...

In this study, we synthesized and evaluated a series of zeolitic imidazolate framework-67 (ZIF-67) derivatives as electrode materials for VRFBs, aiming to enhance ...

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