

Title: Coordination chemistry flow battery

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This Review examines how ligand properties and coordination effects shape electrolyte thermodynamics, kinetics and electrochemical performance, guiding the rational ...

This Review focuses on the role of coordination chemistry in the design of redox-active electrolytes for aqueous redox flow batteries.

This work shows that psq - is a promising scaffold for bipolar energy storage molecules and illustrates the opportunities for innovation in RFB design through the development of fit-for ...

This review provides an overview of the recent development of soluble metal coordination compounds, such as Ferrocene, and ...

Here, we review the handful of metal coordination complexes proposed as redox flow battery electrolytes. We highlight examples with careful ligand design, driving research ...

Redox flow batteries have the potential to address many of the limitations of existing battery chemistries, like lithium-ion, by offering a number of critical advantages: separation of power ...

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Redox flow batteries (RFBs) that employ sustainable, abundant, and structure-tunable redox-active species are of great inter-est for large-scale energy storage.

Alkaline iron flow batteries (AIFBs) are promising for long-duration energy storage due to the abundance of iron resources. To date, their cycling stability is challenged by the ...

We present the first alkaline redox flow battery (a-RFB) based on the coordination chemistry of cobalt with 1-[Bis (2-hydroxyethyl)amino] ...

We present the first alkaline redox flow battery (a-RFB) based on the coordination chemistry of cobalt with 1-[Bis (2-hydroxyethyl)amino]-2-propanol (mTEA) and iron with ...

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