
Their work focuses on the flow battery, an electrochemical cell that looks promising for the job--except for one problem: Current flow batteries rely on vanadium, an energy ...

Redox flow batteries (RFBs) are considered as promising candidates for large-scale energy storage. However, traditional RFBs ...

This work demonstrates a new, organic redox-flow battery (RFB) that outlives its predecessors, offering the longest-lived high-performance organic flow battery to date.

We demonstrate a long-lifetime, aqueous redox-flow battery that can operate at a pH as low as 12 while maintaining an open-circuit voltage of over 1 V. We functionalized 2,6 ...

Because quinone-to- hydroquinone cycling occurs rapidly and reversibly in photosynthesis, we expect to be able to employ it to obtain high current density, high efficiency, and long lifetime in...

We have demonstrated the performance of an aqueous redox flow battery composed of a negative electrode consisting of a redox couple between anthraquinone di-sulfonate and its ...

Redox flow batteries (RFBs) are considered as promising candidates for large-scale energy storage. However, traditional RFBs based on toxic metal ions have deficiencies ...

Zinc-bromine flow batteries face challenges from corrosive Br2, which limits their lifespan and environmental safety. Here, the authors introduce sodium sulfamate as a Br2 ...

This work demonstrates a new, organic redox-flow battery (RFB) that outlives its predecessors, offering the longest-lived high ...

This work demonstrates a new, organic redox-flow battery (RFB) that outlives its predecessors, offering the longest-lived high-performance organic flow battery to date. It ...

We recently published initial results on the performance of a quinone-bromide flow battery that appears particularly well suited to cost-effective storage of large amounts of electrical energy, ...

Quino Energy has developed a process that converts quinone raw materials - dyestuff chemicals - directly into high-performance, long lifetime quinones using the flow battery system itself as ...

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