# Alkaline iodine flow battery

Zn-I 2 flow batteries, with a standard voltage of 1.29 V based on the redox potential gap between the Zn 2+ -negolyte (-0.76 vs. SHE) and I 2 -posolyte (0.53 vs. SHE), are gaining attention ...

Here, we formulated and evaluated an aqueous alkaline Zn-iodine battery with a two-electron transfer employing an organic iodized salt cathode and a Cl - -manipulated electrolyte.

This study presents the design and demonstration of an alkaline Sn-Fe ARFB with K 4 [Fe (CN) 6] and K 2 Sn (OH) 6 in the catholyte and anolyte respectively, achieving a high-capacity and low-cost ...

With a focus on practical application, this work identifies key challenges in the field and proposes comprehensive optimization strategies, aiming to provide guidance for the design of high ...

Herein, we implemented a novel strategy to achieve the desired reversible two-electron transfer behavior by utilizing a tailored chloride cathode and modified electrode.

Herein, an alkaline zinc-iodine flow battery is designed with potassium sodium tartrate (PST) as an effective additive for Zn (OH)4²? anolyte, which enables a high open circuit voltage of...

Herein we report a tin-iodine ARFB employing a defect-modified graphite felt (Dm-TGF) anode via plasma treatment and cobalt-assisted etching.

Aqueous Zn-I flow batteries are attractive for grid storage owing to their inherent safety, high energy density, and cost-effectiveness.

In this research, we propose an efficient electrolyte additives strategy to improve the zinc deposition behavior, inhibit the growth of zinc dendrites, and prolong the cycling life of zinc-based ...

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