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Zinc-iron flow battery put into use

Overview

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Recently, aqueous zinc–iron redox flow batteries have received great interest due to their eco-friendliness, cost-effectiveness, non-toxicity, and abundance. However, the development of zinc–iron redox flow batteries (RFBs) remains challenging due to severe inherent difficulties such as zinc.

Given their low cost, exceptional performance, and wide availability of raw materials, zinc iron flow battery promise to revolutionize large-scale energy storage applications, significantly enhancing energy usage efficiency. The global energy landscape is undergoing a transformative shift, driven.

Zinc–iron redox flow batteries (ZIRFBs) possess intrinsic safety and stability and have been the research focus of electrochemical energy storage technology due to their low electrolyte cost. This review introduces the characteristics of ZIRFBs which can be operated within a wide pH range.

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