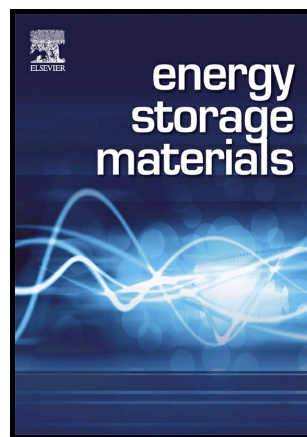


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Rechargeable potassium-ion batteries enabled by potassium-iodine conversion chemistry

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Abstract:

Potassium-ion batteries (KIBs) have emerged as attractive alternatives to dominative lithium-ion batteries for grid-level electricity storage due to lower potential of K^+/K redox couple in non-aqueous electrolyte and abundant potassium resource. The current intercalation cathodes used in KIBs provide limited active sites in their frameworks while conversion chemistry offers the feasibility for much improved potassium-ion storage capability. We for

¹ K.L. and H.Z. contributed equally to this work.

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