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Gelatin coated self-made manganese dioxide as cathode material in aqueous rechargeable zinc-ion battery

Aqueous rechargeable zinc-ion battery (ARZIB) has been a competitive candidate for the energy storage system because of its high energy density, high safety, low cost, and environmental friendliness. From many cathode materials, manganese dioxide ( $MnO_2$ ) has been widely used because of the low cost, abundant resource and environment friendly features.