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Superior Electrocatalysis for Hydrogen Evolution with Crumpled Graphene/Tungsten Disulfide/Tungsten Trioxide Ternary Nanohybrids

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Abstract

Transition metal dichalcogenide is a promising candidate for platinum-free electrocatalysts in renewable energy applications. In this work, we developed an aerosol processing method for facile and green synthesis of reduced graphene oxide (rGO)/tungsten disulfide (WS₂)/tungsten trioxide (WO₃) ternary nanohybrids. The resulting material has a spherical structure constructed by crumpled graphene and WS₂/WO₃ nanorods. The crumpled graphene/WS₂/WO₃ (CGTH)

¹ Y. Chen and R. Ren contributed equally to this work.

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