Short Communication

Cu₂O/RGO Composite as Anode Materials for Lithium Ion Batteries

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In this work, cuprous oxide/reduced graphene oxide (Cu₂O/RGO) composite was successfully synthesized by a low-cost, facile, green, solution-based chemical method. The as-synthesized products were characterized by X-ray powder diffraction (XRD). As anode materials for lithium ion batteries, the results show RGO can enhance the conductivity of Cu₂O, as well as relieve the volume expansion/contraction. Therefore, Cu₂O/RGO composite shows high capacity retention, high reversible capacity and excellent cycling stability.

Keywords: Cuprous oxide (Cu₂O), lithium ion batteries, reduced graphene oxide (RGO), electrochemical performance

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