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Graphene quantum dots-induced morphological changes in $CuCo_2S_4$ nanocomposites for supercapacitor electrodes with enhanced

performance

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Abstract

Graphene quantum dots (GQDs) have been explored in recent years for electrochemical applications with considerable potentials. Here, we present GQD-doped CuCo₂S₄ nanocomposites through two-step hydrothermal process for supercapacitor electrodes. The surface of CuCo₂S₄ nanosheets changes from smooth to particles-accumulative shape, which assists the electrochemical cycling processes as well as the ion diffusion and charge transfer kinetics for improved supercapacitor performances. As a result, GQD/CuCo₂S₄ electrodes

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