Two-step Synthesis and Characterization of MnCo_2O_4 Composite and its Electrochemical Performance

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Supercapacitors are a novel kind of energy storage device. Two kinds of nanostructured materials of MnCo_2O_4 can be made using a two-step method. It can be proven that the nanosheet that grows evenly on the base of the nickel foam belongs to nanostructured MnCo_2O_4 . Electrochemical experiments show that this MnCo_2O_4 composite has excellent electrochemical performance, which is similar to the novel structure of the mesoporous nanosheet of MnCo_2O_4 . This MnCo_2O_4 /composite material of nickel foam is a potential electrode material for supercapacitors. The structure and morphology of MnCo_2O_4 has an obvious influence on its electrochemical performance. The good structure and excellent performance suggest its promising application in supercapacitors.

Keywords: Supercapacitors; Characterization; Nanostructure; Electrochemical performance

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