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Structural and Chemical Synergistic Effect of CoS Nanoparticles and Porous Carbon Nanorods for High-Performance Sodium Storage

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Abstract

Considering inherent large structural deterioration of conversion-type anode materials during repeated sodiation/desodiation process, the ingenious integration of both nanostructure engineering and chemical hybridization is highly desirable and challenging. Here, ultrafine CoS nanoparticles embedded in porous carbon nanorods (denoted as 7-CoS/C) were facilely fabricated via simultaneous in-situ carbonization and sulfidation of Co-metal organic frameworks (Co-MOF) and have been applied as

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