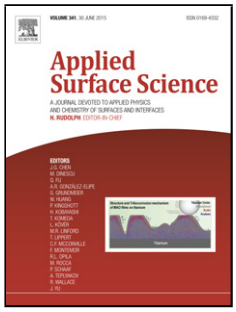

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Nitrogen-doped 3D Reduced Graphene Oxide/Polyaniline Composite as Active Material for Supercapacitor Electrodes

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Highlights

- A facile strategy for the fabrication 3D nitrogen-doped graphene is proposed.
- N-3D-rGO/PANI-B exhibited relatively good electrochemical properties in supercapacitor.
- β-MnO_2 was the good oxidant for preparing PANI composites.

Abstract

A facile strategy for the fabrication of a nitrogen-doped 3D reduced graphene oxide (N-3D-rGO) macroporous structure is proposed in this paper. The proposed strategy used polystyrene microspheres as the templates and melamine as the nitrogen source.