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Solvent-induced synthesis of nitrogen-doped hollow carbon spheres with tunable surface morphology for supercapacitors

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Highlights

- Nitrogen-doped hollow carbon spheres (NHCSs) with different surface morphology were prepared.
- The feeding of ethanol makes the surface of NHCSs turned from smooth to concave.
- NHCSs showed high capacitance with excellent rate performance.

Abstract

Nitrogen doped hollow carbon spheres (NHCSs) with tunable surface morphology have been prepared through one-pot carbonization method by using melamine-formaldehyde spheres as template and resorcinol-based resin as carbon

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