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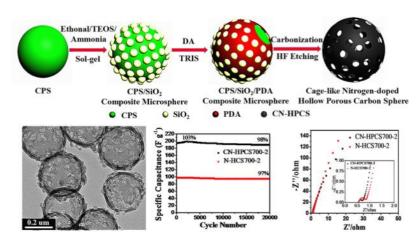
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Synthesis of uniform discrete cage-like nitrogen-doped hollow porous carbon spheres with tunable direct large mesoporous for ultrahigh supercapacitive performance

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Graphical Abstract



Uniform discrete cage-like nitrogen-doped hollow porous carbon spheres with tunable direct large mesoporous were firstly synthesized for ultrahigh supercapacitive performance.

Highlights

- Uniform discrete cage-like nitrogen-doped hollow carbon spheres were synthesized.
- The microspheres have tunable direct large mesoporous (18-30nm) on the shells.
- The large mesoporous can effectively reduce the mass-transfer resistance.
- The microspheres exhibit an ultrahigh supercapacitive performance.

Abstract: Uniform discrete cage-like nitrogen-doped hollow porous carbon spheres (CN-HPCS) with tunable direct large mesoporous (18-30 nm) have been successfully synthesized for the first time by using the carboxylated polystyrene spheres and silica particles as a dual-template and dopamine as the carbon and nitrogen sources. When they

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