Preparation of Activated Carbon Derived From *Xanthoceras sorbifolium* Bunge and its Electrochemical Properties

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Porous carbon was the residue of *Xanthoceras sorbifolium* Bunge oil after pressing as carbon source and zinc chloride as activator. Multistage porous carbon was prepared. The chemical and physical properties of porous carbon materials were characterized by transmission electron microscopy (TEM), scanning electron microscopy (SEM), X-ray diffraction (XRD), nitrogen adsorption/desorption, Raman spectroscopy and XPS. Nitrogen adsorption/desorption experiments show that ZnCl₂ has good pore expansion, with a total pore volume of 0.68 cm³/g and a maximum specific surface area of 1079.79 m²/g. At 1 A/g current density, the specific capacitance is 220 F/g. The results show that multistage carbon is one of the ideal electrode materials for supercapacitors.

Keywords: electrochemical properties; *xanthoceras sorbifolia*; porous carbon

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