Short Communication

Synthesis of Porous Carbon by Activation Method and its Electrochemical Performance

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For potential applications in supercapacitors, Porous carbon has been synthesized by the facile and economic activation method. The SEM and XRD are adopted to analyze the microstructure and the specific surface area. The material was tested as the electrode material for supercapacitors. With the increase of resin content, the specific capacitance of porous carbon increases gradually. When polyvinylbutyral in the compounds is 80%, the specific capacitance is 201.9 F/g, and capacitance retention rate is 93.38% for 500 cycles. The compounds may have a good prospect in supercapacitors.

Keywords: porous carbon, specific capacitance, activation method, electrochemical, supercapacitor

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