

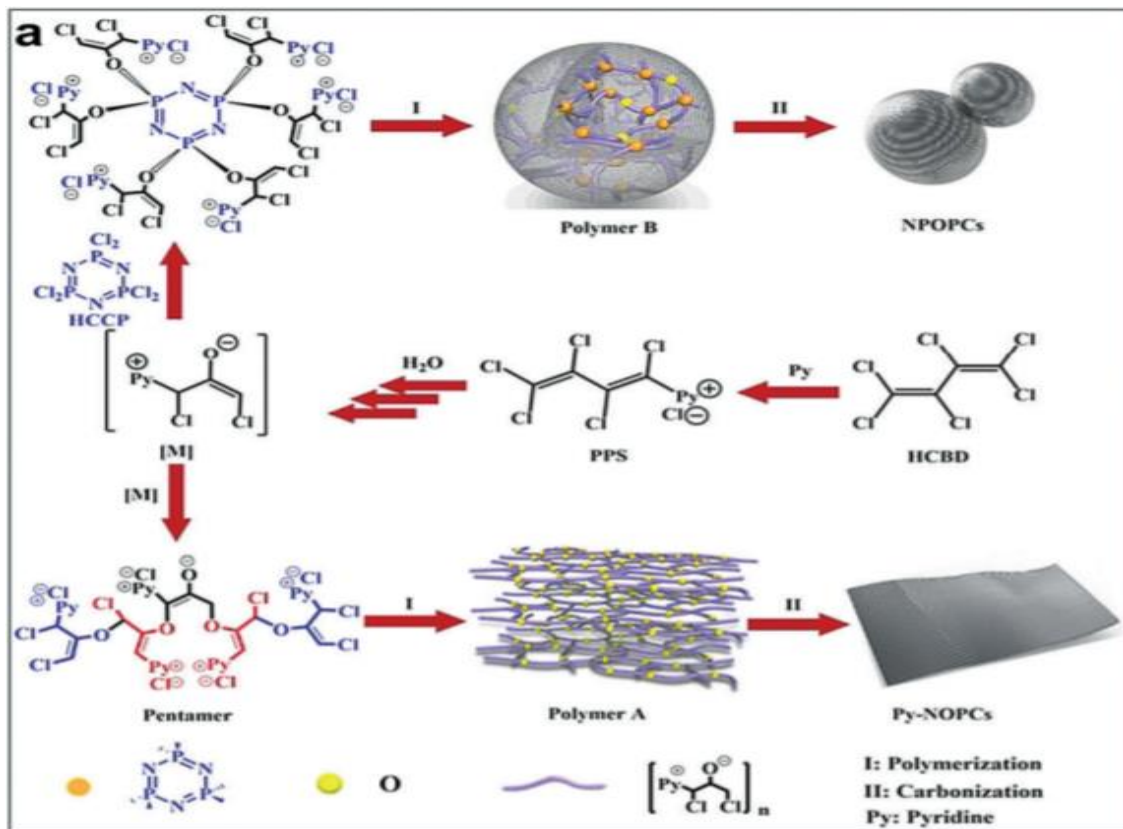
Heteroatom-Doped Porous Carbon Material with Unprecedented High Volumetric Capacitive Performance

Speaker : 陳昶安 Date : 2019/4/22(Mon) 12:00-13:00

Abstract :

Supercapacitor is a high energy density capacitor that applied to very rapid charge/discharged cycle and there is a kind of supercapacitor using porous carbon for the high body surface area. Its high porosity can absorb many electrons, leading to higher capacitance. However, the major disadvantage of this material is its low density, causing the high-volume and difficulty of packing.

Therefore, the authors came up with the heteroatom-doped porous carbon material that can improve the volumetric energy density. Its density is 2.15 g/cm^3 , and which is much higher than the previous work. What's more, with the ultrahigh volumetric capacitance, the heteroatom-doped porous carbon materials solve the problem of excessive volume of other supercapacitor and brings out a significance influence of the development of supercapacitor.



Referance :

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