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SUPPORTING INFORMATION

Facile synthesis of microporous carbon spheres by selective pyrolysis

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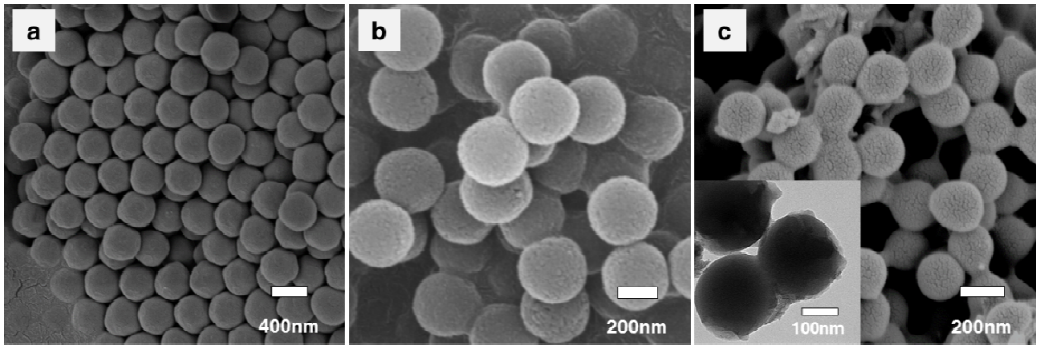

Figure S1. SEM images of (a) PS, (b) post-crosslinked PS, (c) PS pyrolyzed microporous carbon particles. Inset shows TEM image of carbonized particles

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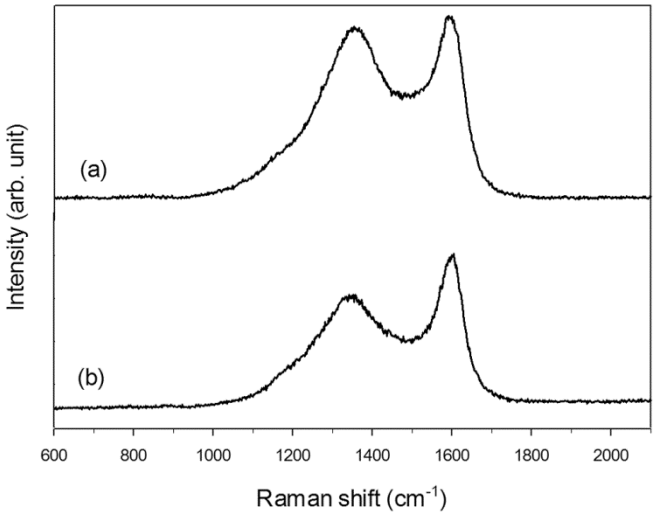

Figure S2. Raman spectra of microporous carbon spheres prepared by using the pyrolysis of PS-PMMA (MMA 20 wt%)) spheres at temperatures of (a) 900°C and (b) 700°C. The peak at 1580 cm^{-1} (G band) was associated with amorphous sp^2-bonded carbon atoms in a two-dimensional graphitic layer. The peak at 1350 cm^{-1} (D band) was associated with the presence of defects in the graphitic layers.

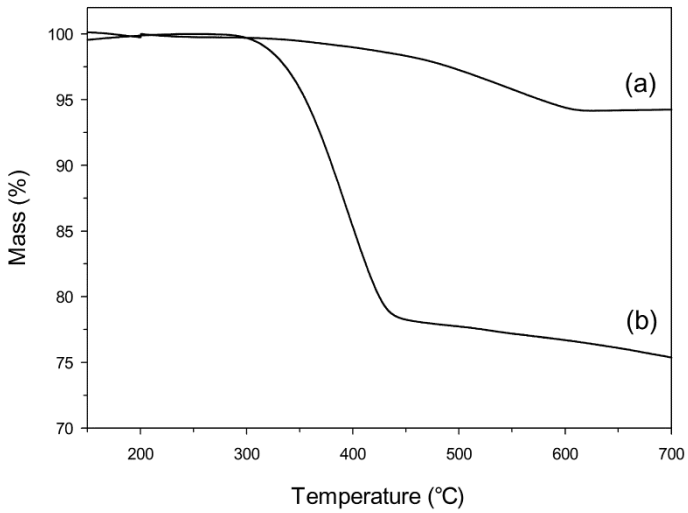

Figure S3. TGA curves of (a) post-crosslinked PS and (b) post-crosslinked PS-PMMA particles (20 wt% MMA) under a nitrogen flow.

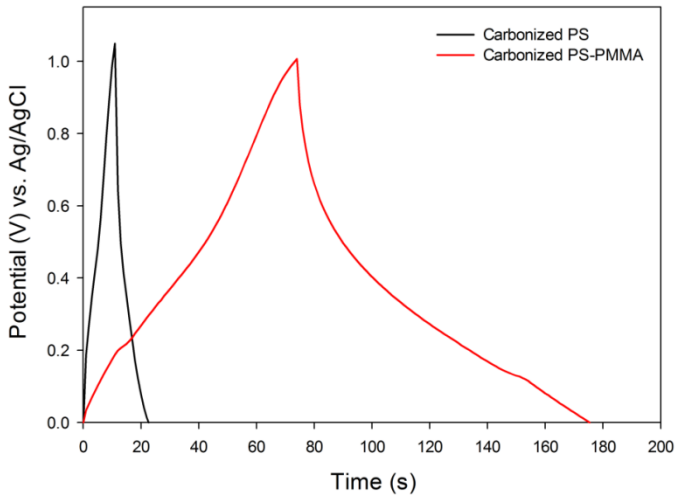

Figure S4. Galvanostatic charge-discharge curves of carbonized PS and PS-PMMA(MMA 20wt%) spheres at the current density of 0.5 A/g. The test was carried out in a standard three-electrode system with Pt as the counter electrode, Ag/AgCl as the reference electrode and 1M H_2SO_4 aqueous solution as an electrolyte at room temperature.