SUPPORTING INFORMATION

Facile synthesis of microporous carbon spheres by selective pyrolysis

Hae-Min Yoo and Jun Hyuk Moon*

Department of Chemical and Biomolecular Engineering, Sogang University,
1 Shinsu-dong Mapo-gu Seoul, South Korea
**Figure S1.** SEM images of (a) PS, (b) post-crosslinked PS, (c) PS pyrolyzed microporous carbon particles. Inset shows TEM image of carbonized particles.
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 H₂SO₄ aqueous solution as an electrolyte at room temperature.