Supporting Information

Nanospace-Confinement Copolymerization Strategy for Encapsulating Polymeric Sulfur into Porous Carbon for Lithium-Sulfur Batteries

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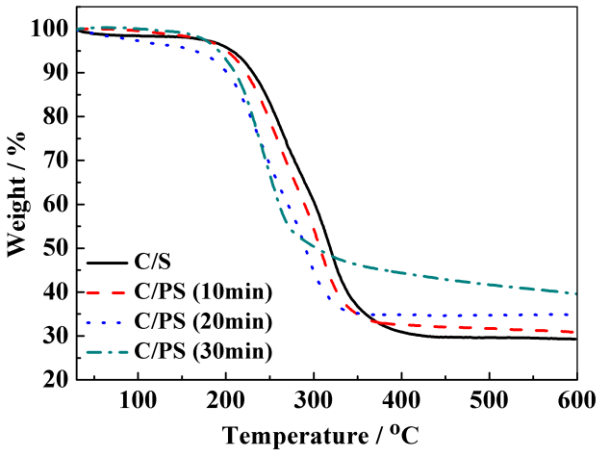

Figure S1. TG curves of C/S and C/PS composites.

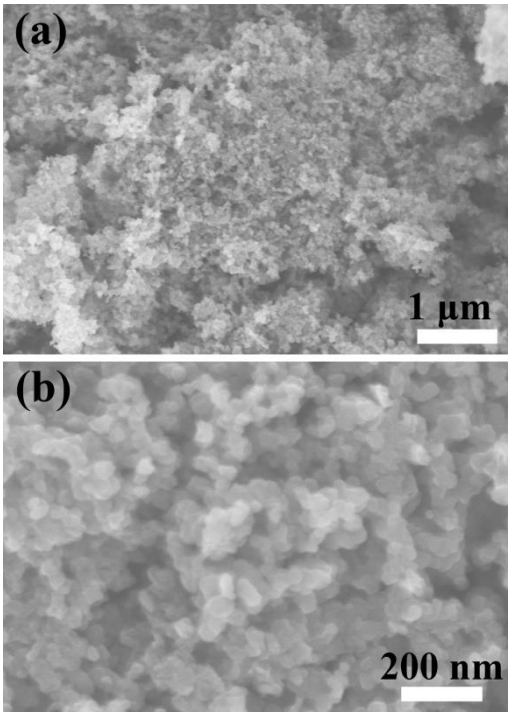

Figure S2. (a, b) SEM images of C/S composite with 70 wt% sulfur.

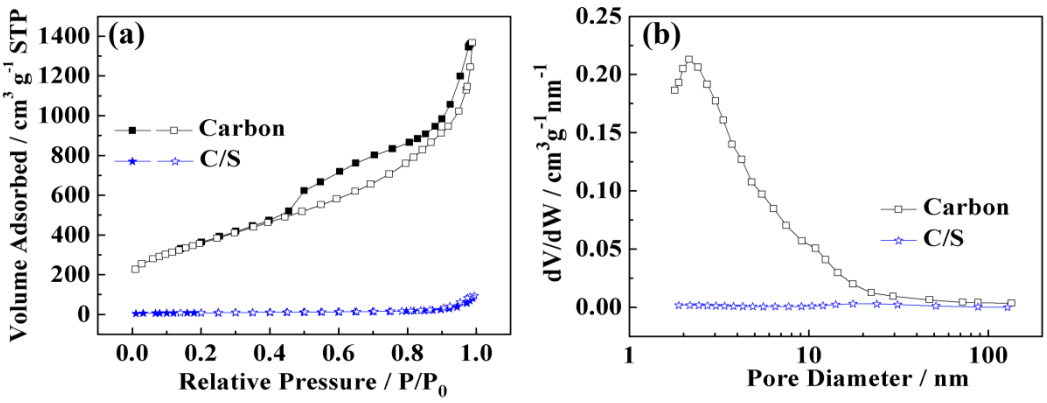

Figure S3. (a) N_2 adsorption/desorption isotherms and (b) pore size distribution of carbon and C/S composite.

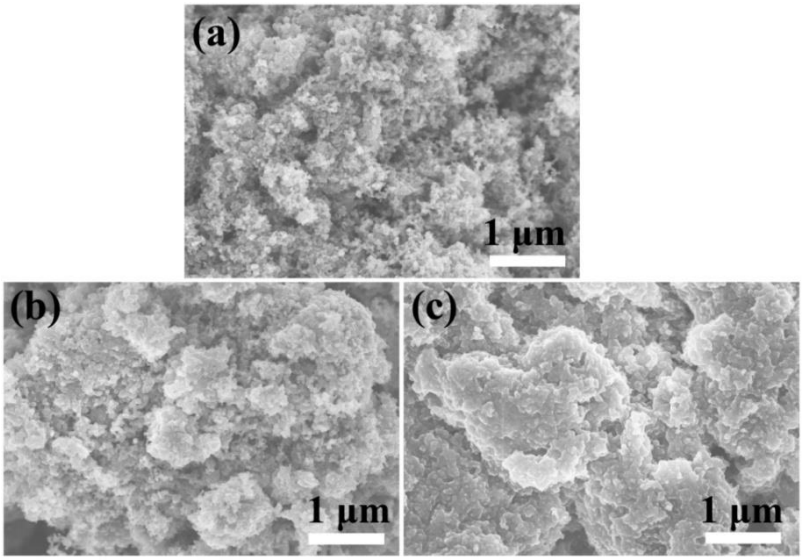

Figure S4. SEM images of C/PS composites prepared at different polymerization times: (a) 10, (b) 20, and (c) 30 min.

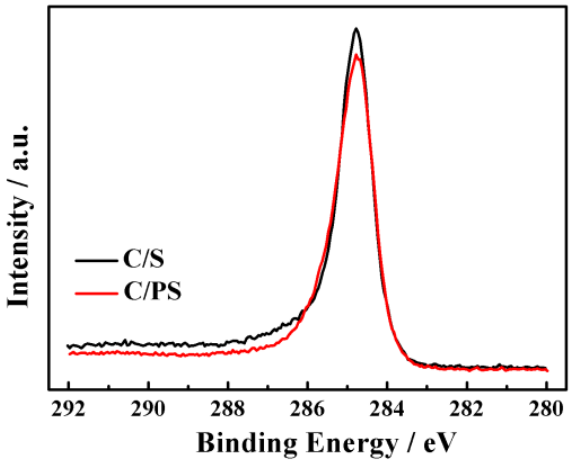

Figure S5. High-resolution C 1s XPS spectra of C/S and C/PS composites.

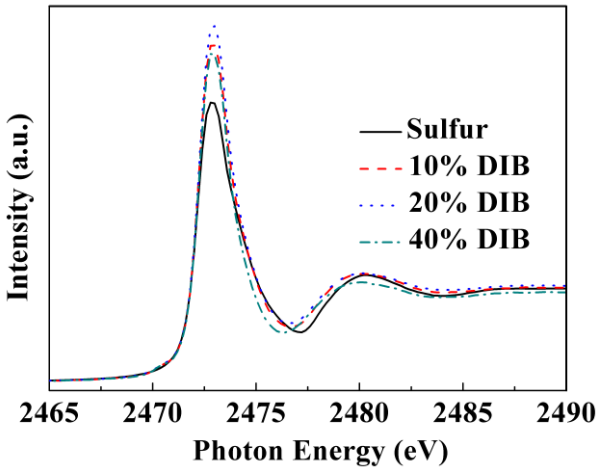

Figure S6. S K-edge XANES spectra of elemental sulfur and polymeric sulfur with different contents of DIB.

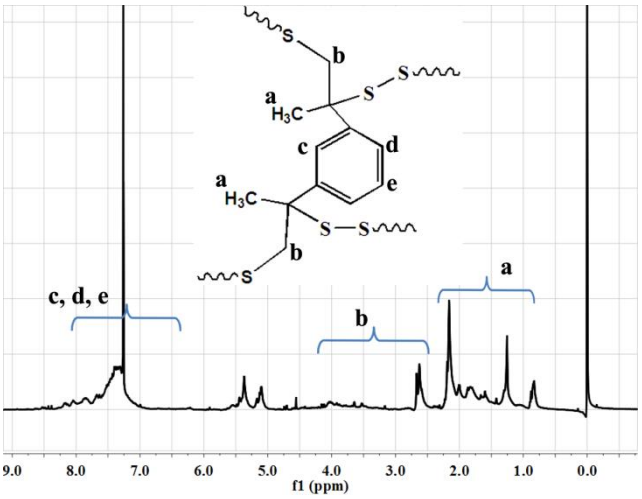

Figure S7. ^{1}H-NMR spectrum of polymeric sulfur.

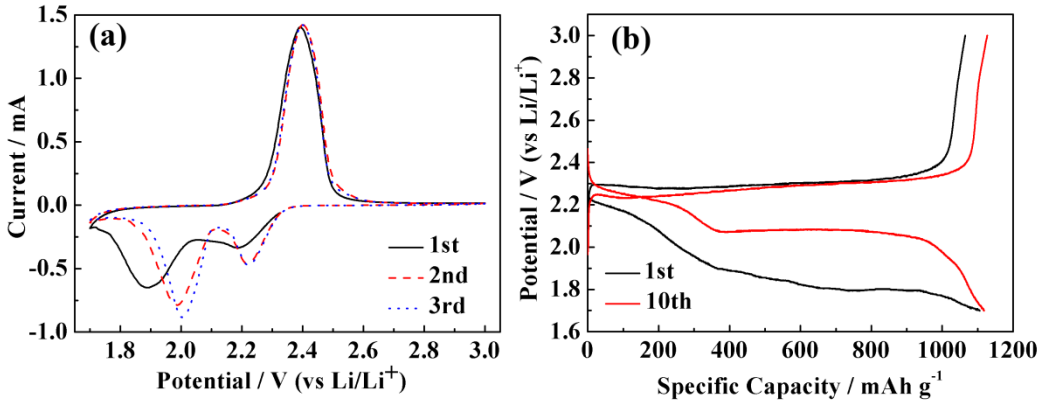

Figure S8. CV curves at a scanning rate of 0.2 mV s^{-1} and galvanostatic charge/discharge profiles at a current density of 0.5 C of C/SP composite (20 min) electrode.

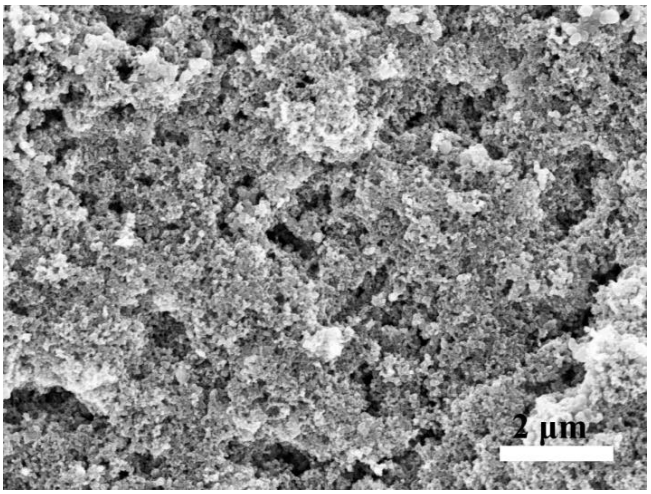

Figure S9. SEM images of C/PS composite (20min) electrode before cycling.

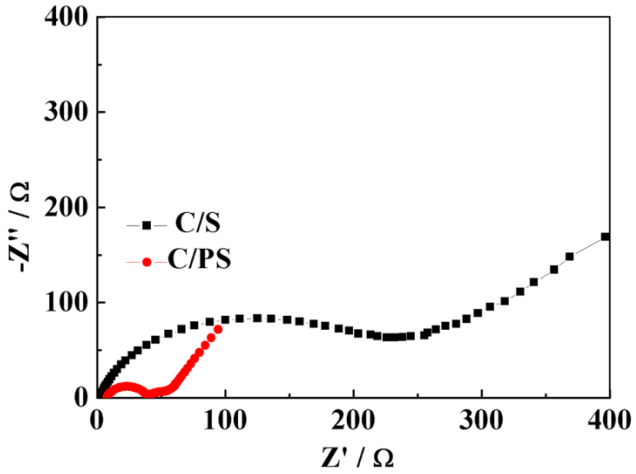

Figure S10. EIS spectra of C/S and C/PS electrodes after cycling.