Supporting Information

Ultrafine Nano-Sulfur Particles Anchored on In-situ Exfoliated Graphene for Lithium-Sulfur Batteries

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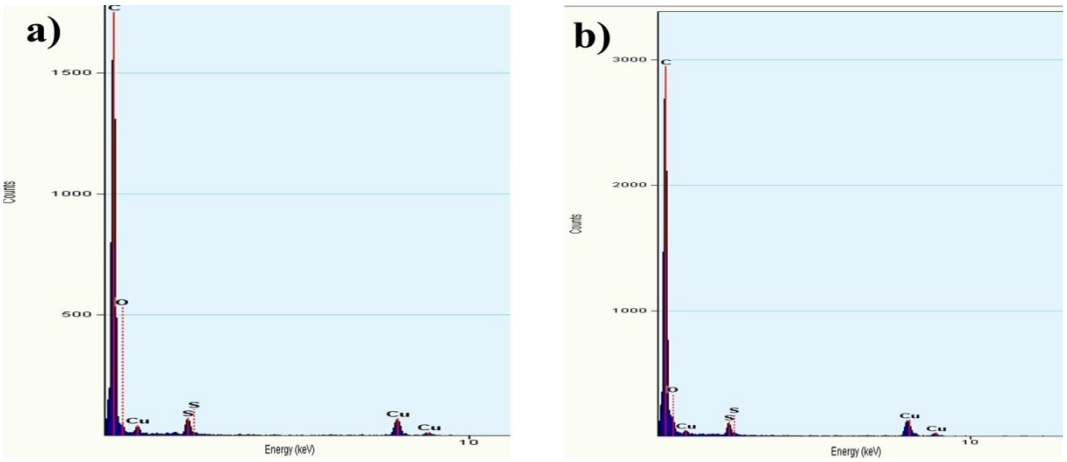

Figure S1. EDS of S/G-DBD (a) and S/Graphite (b).

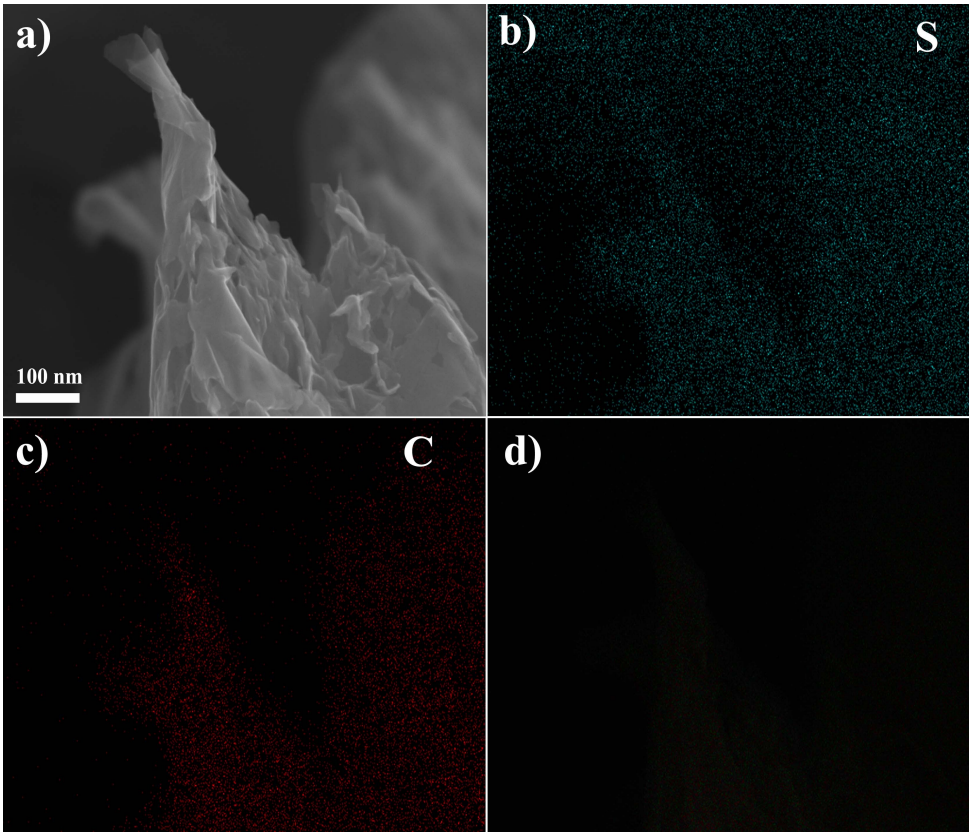

Figure S2. SEM image of S/G-DBD (a) and its corresponding element mappings of S (b), C (c), and hybrid element mapping (d).

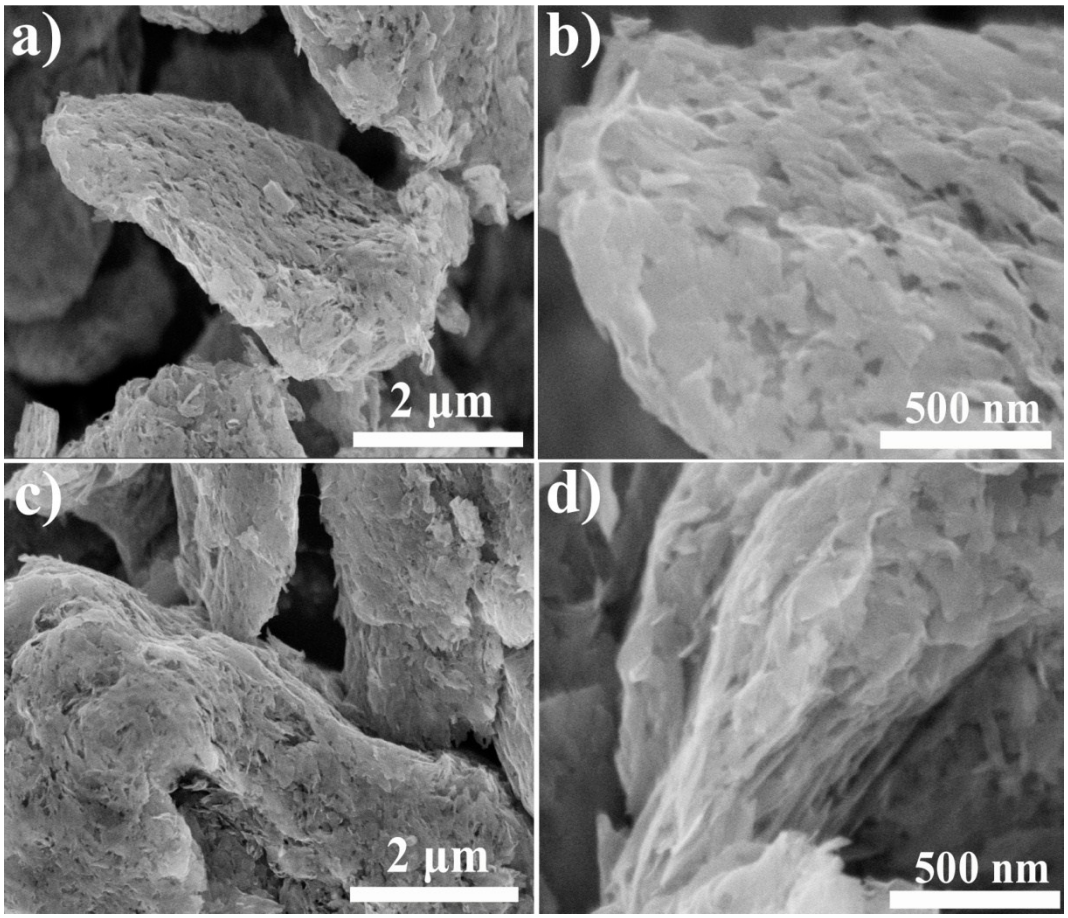

Figure S3. SEM images of (a, b) S/G-DBD2 and (c, d) S/G-DBD5 synthesized at the controlled time of 2 h and 5 h with sulfur mass percentage of 70 % in the precursor mixture.

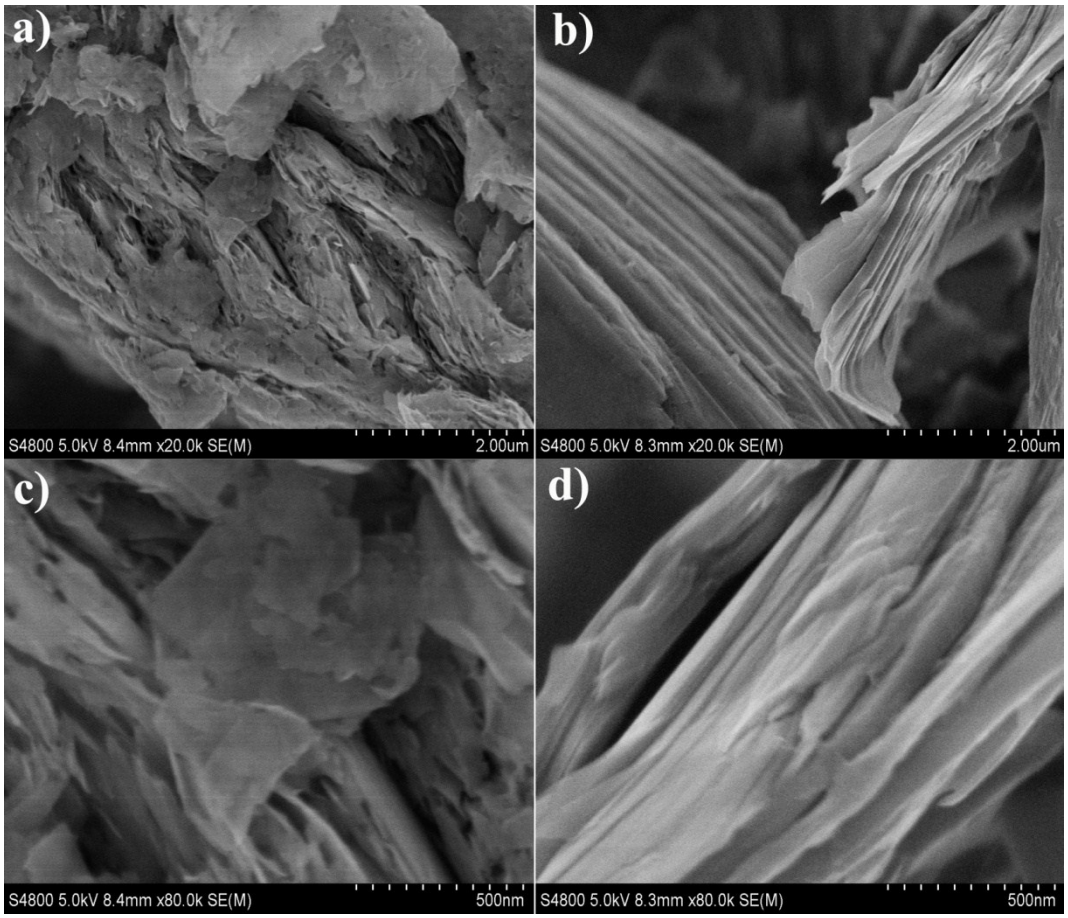

Figure S4. SEM images of S/G-DBD composite with 3 h synthesis time and different sulfur mass percentage of 60 % (a, c), 80% (b, d) in the precursor mixture.

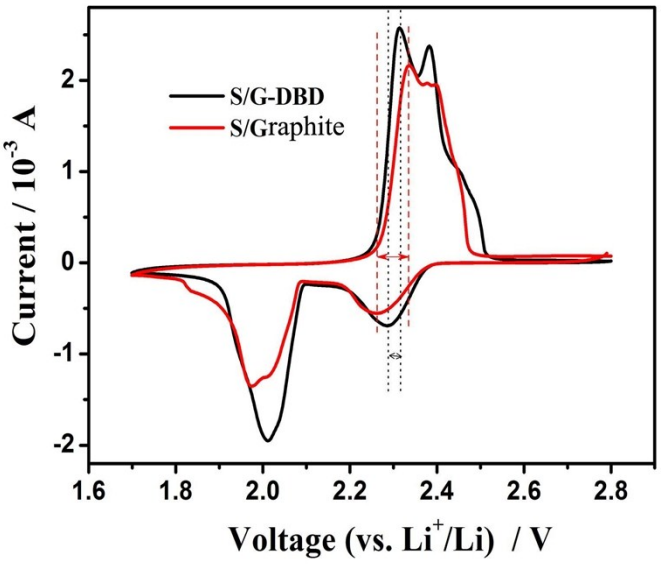

Figure S5. Cyclic voltammogram of S/G-DBD and S/Graphite with a scan rate of 0.1 mV s^{-1} between 1.7 V and 2.8 V.

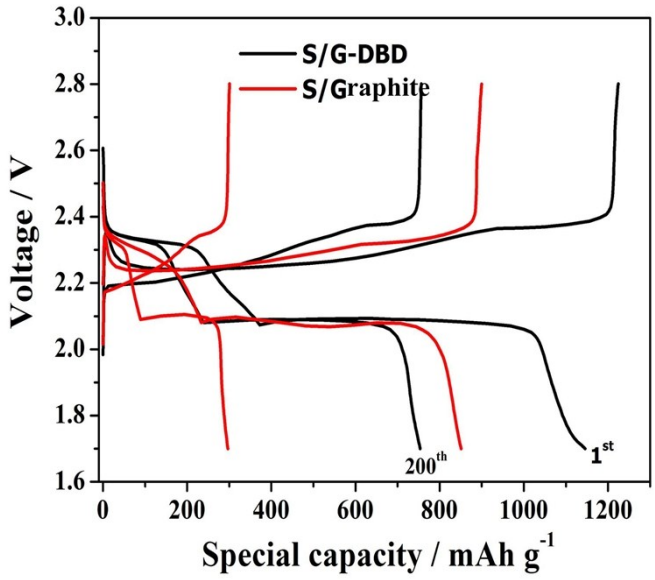

Figure S6. charge-discharge profiles of S/G-DBD and S/Graphite at 0.2 C.