Supplementary Information

Porous Hybrid Aerogels with Ultrahigh Sulfur

Loading for Lithium-Sulfur Batteries

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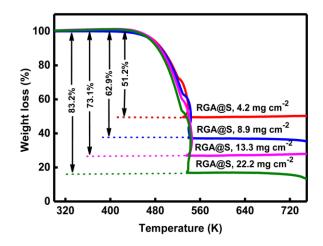


Fig. S1 TGA curves of RGA@S hybrid aerogels with various sulfur contents.

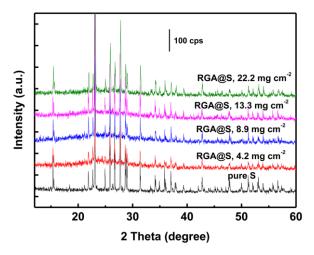


Fig. S2 X-ray diffraction patterns of RGA@S hybrid aerogels with various sulfur contents.

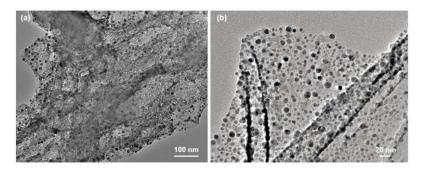


Fig. S3 TEM images of RGA@S hybrid aerogel with sulfur loading of 8.9 mg cm⁻².

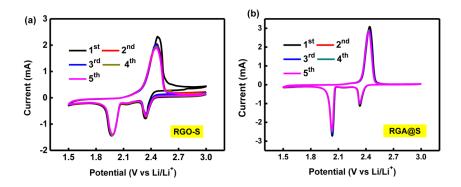


Fig. S4 Cyclic voltammograms at a scan rate of 0.1 mV s⁻¹ for (a) RGO-S electrode and (b) RGA@S electrode with sulfur loading of 4.2 mg cm⁻².

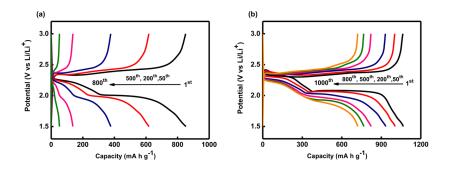


Fig. S5 Discharge/charge profiles of selected cycles at a current density of 2 A g^{-1} for (a) RGO-S and (b) RGA@S electrodes with sulfur loading of 4.2 mg cm⁻².

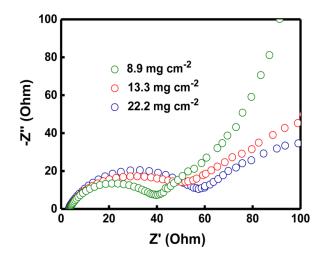


Fig. S6 Electrochemical impedance spectra of the RGA@S electrodes with different sulfur loading.