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Supporting information

## A Novel SnS<sub>2</sub>@Graphene Nanocable Network for High-Performance Lithium Storage

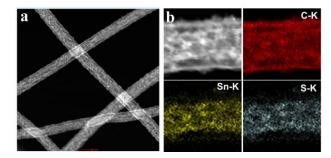
Debin Kong,  ${}^{a,b,c}$  Haiyong He,  ${}^{b}$  Qi Song,  ${}^{b}$  Bin Wang,  ${}^{b}$  Quan-Hong Yang  ${}^{a,c}*$  and Linjie Zhi  ${}^{a,b,c}*$ 

[\*]

<sup>a</sup>School of Chemical Engineering and Technology, Tianjin University, Tianjin, 300072 (China) <sup>b</sup>National Center for Nanoscience and Technology, No. 11 Beiyitiao, Zhongguancun, Beijing, 100190 (China)

<sup>c</sup>The Synergistic Innovation Center of Chemistry and Chemical Engineering of Tianjin, Tianjin, 300072 (China)

E-mail: zhilj@nanoctr.cn, qhyangcn@tju.edu.cn



**Figure S1**. (a) Dark field transmission electron microscopy image. (b) Carbon, Tin and sulfur elemental mapping of a selected area of an individual SnS<sub>2</sub>@GT. Scale bar, 100 nm.

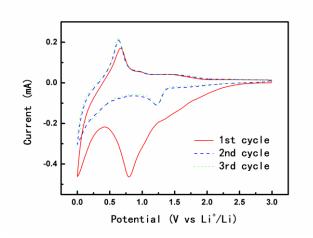
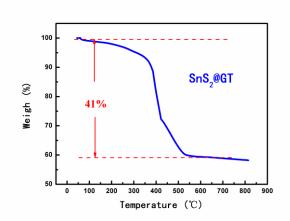


Figure S2. Cyclic voltammetry (CV) behavior of SnS<sub>2</sub>@GT.



**Figure S3**. TGA of as-prepared  $SnS_2@GT$ . The  $SnS_2$  content estimated from the thermal analysis was ca. 71.6 wt % (Note:  $SnS_2$  had been oxidized into  $SnO_2$ ). The analysis was taken in air using a heating rate of 10°C min<sup>-1</sup>. The weight loss from room temperature to 200°C was due to the removal of physisorbed and chemisorbed water.

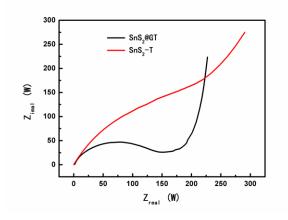


Figure S4. EIS of SnS<sub>2</sub>@GT and SnS<sub>2</sub>-T