Electronic Supplementary Information (ESI) for

Hierarchical self-assembled Bi_2S_3 hollow nanotubes coated with sulfur-doped amorphous carbon as advanced anode materials for lithium ion batteries

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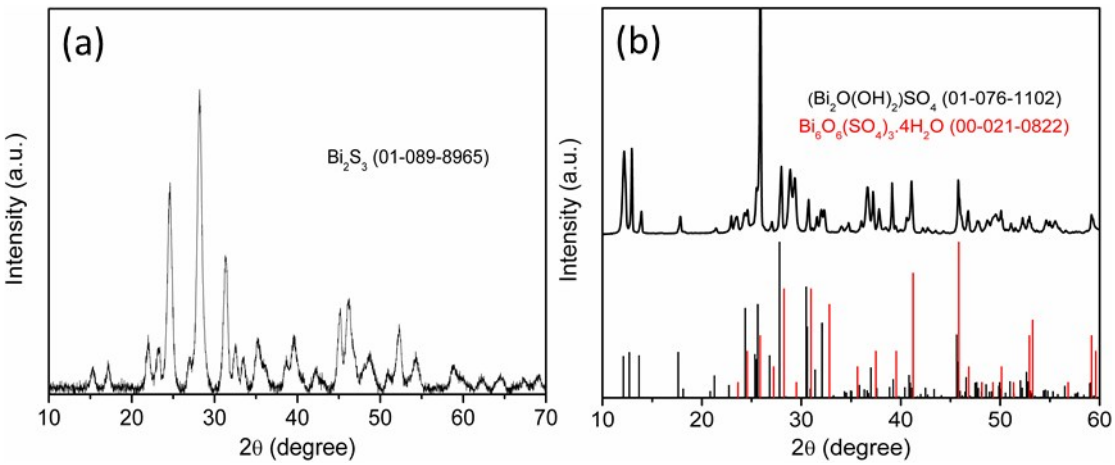

Fig. S1 (a) XRD pattern of the product without post-treatment process; (b) XRD pattern of the sample with no glucose added which is composed of $(Bi_2O(OH)_2)SO_4$ (black line) and $Bi_6O_6(SO_4)_3{\cdot}4H_2O$ (red line) nanosheets.

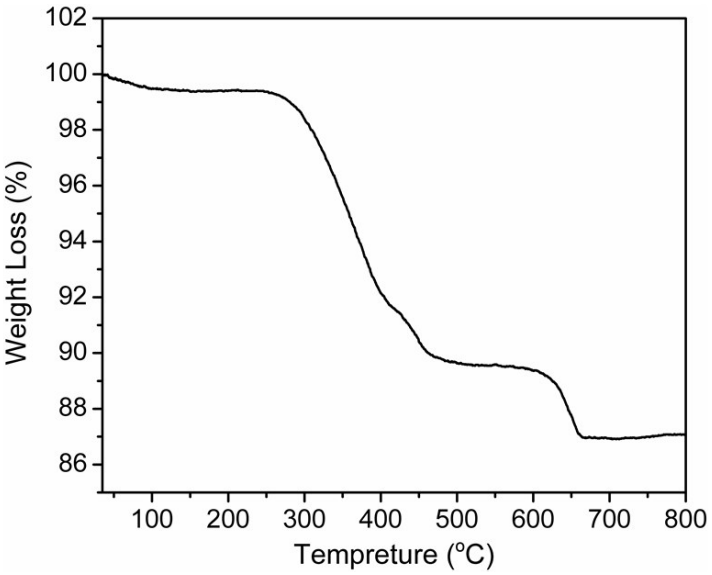

Fig. S2 TGA curve of Bi_2S_3@SC hollow nanotubes from room temperature to 800 °C at a heating rate of 10 °C min^{-1} under air atmosphere.

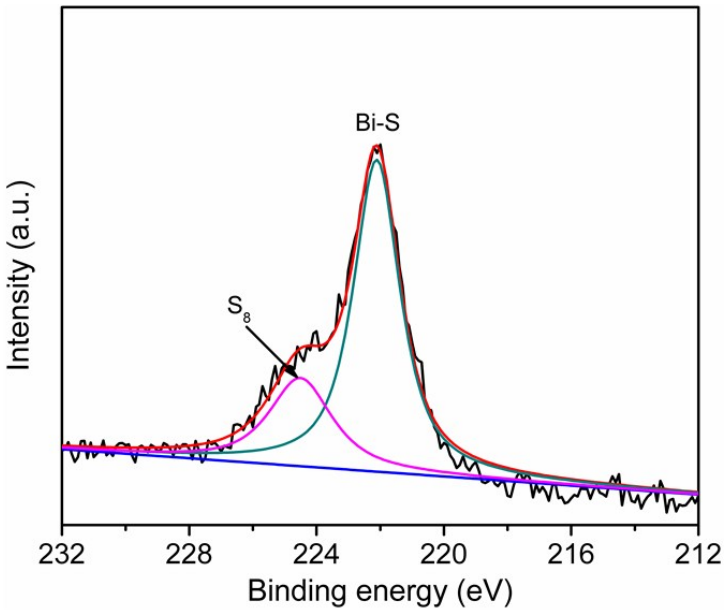

Fig. S3 S 2s region of the XPS spectrum of Bi_2S_3@SC hollow nanotubes

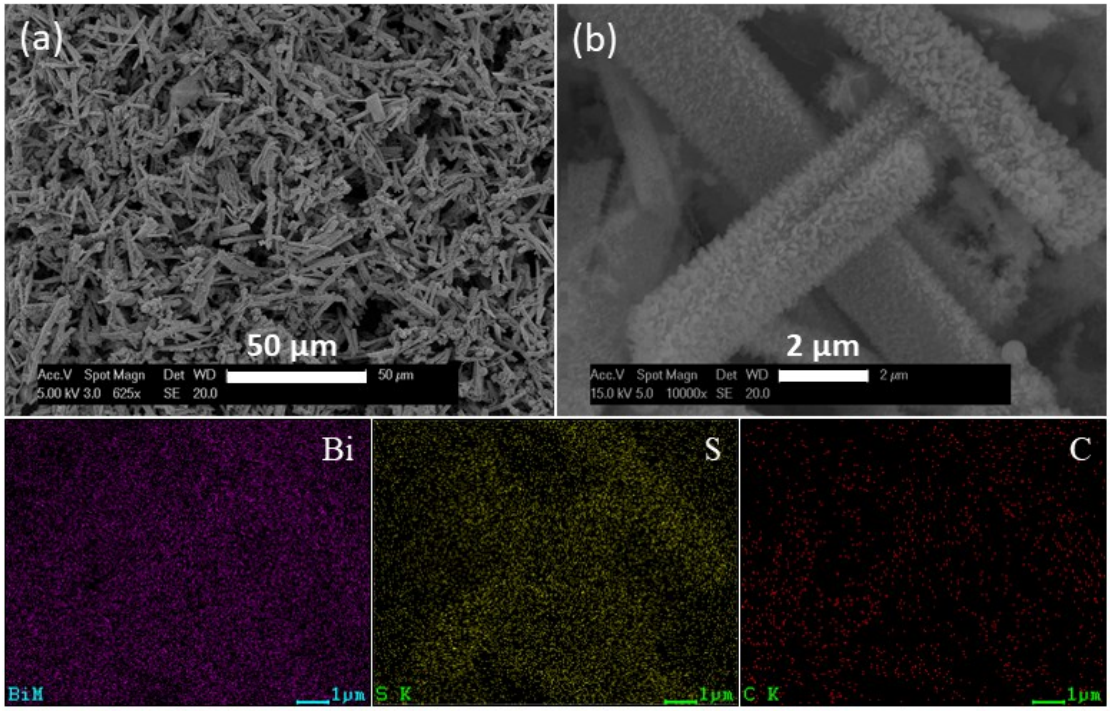

Fig. S4 (a) SEM image of Bi_2S_3@SC hollow nanotubes with a large magnification; (b) SEM image of Bi_2S_3@SC hollow nanotubes with EDS mapping for Bi, S, and C elements.

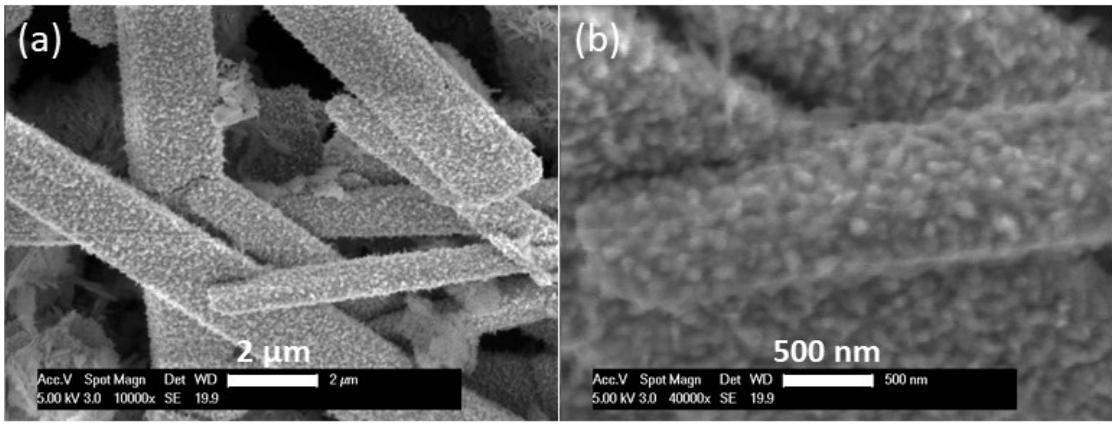

Fig. S5 (a) and (b) SEM images of the obtained product without post-treatment process with different magnifications.

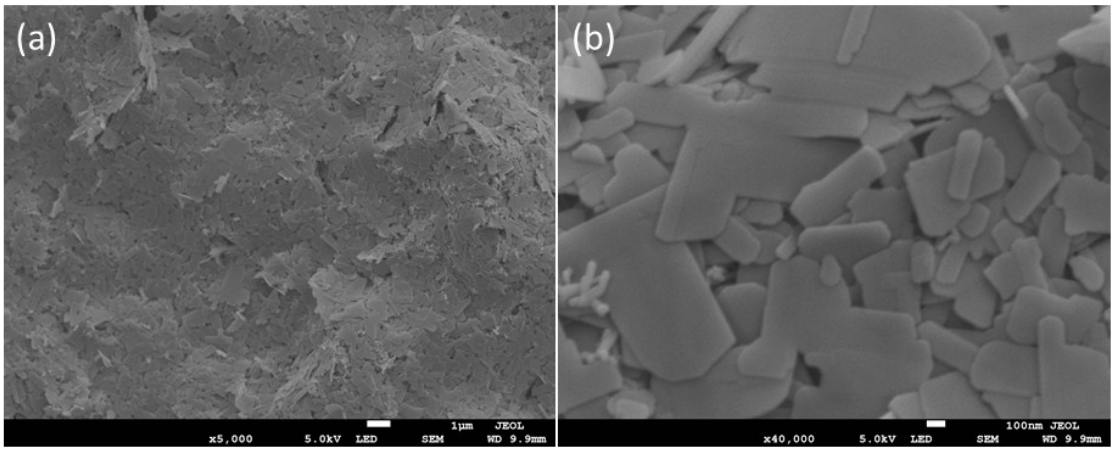

Fig. S6 (a) and (b) SEM images of $(Bi_2O(OH)_2)SO_4$ and $Bi_6O_6(SO_4)_3{\cdot}4H_2O$ nanosheets with different magnifications.

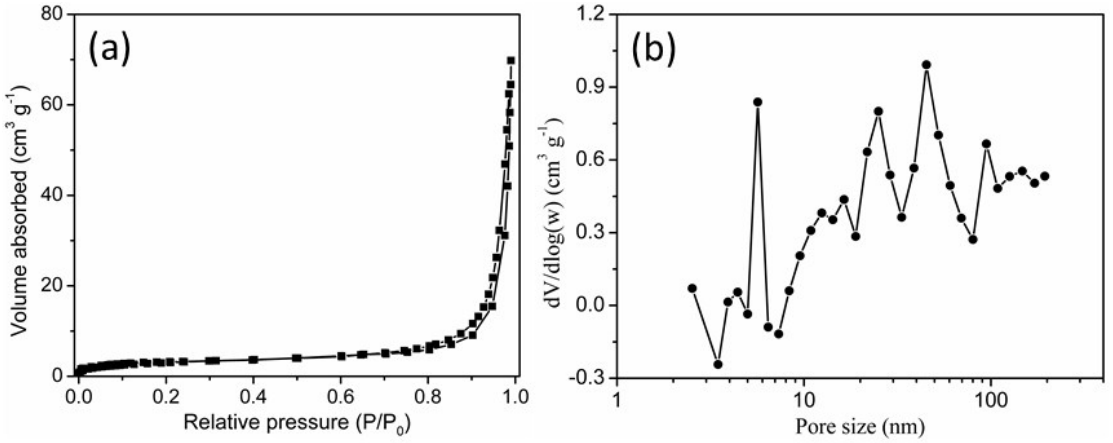

Fig. S7 (a) Nitrogen adsorption/desorption isotherms and (b) pore size distribution curve of Bi_2S_3@SC hollow nanotubes.

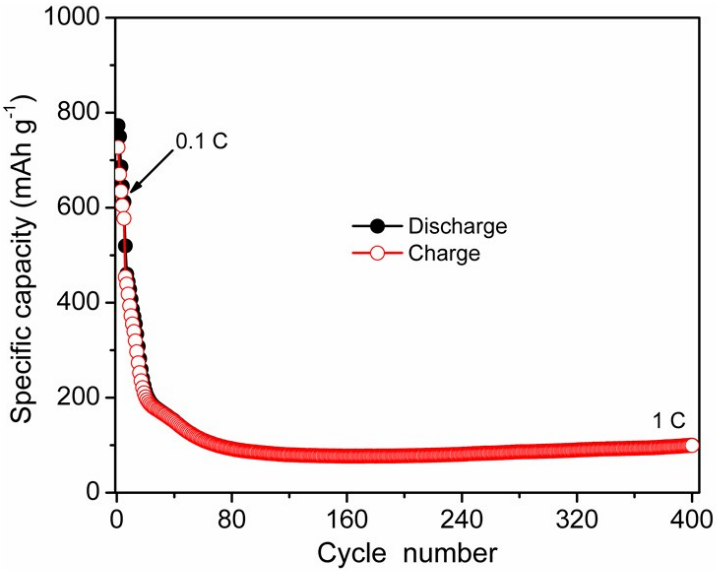

Fig. S8 Cycling performance of $(Bi_2O(OH)_2)SO_4$ and $Bi_6O_6(SO_4)_3{\cdot}4H_2O$ nanosheets.

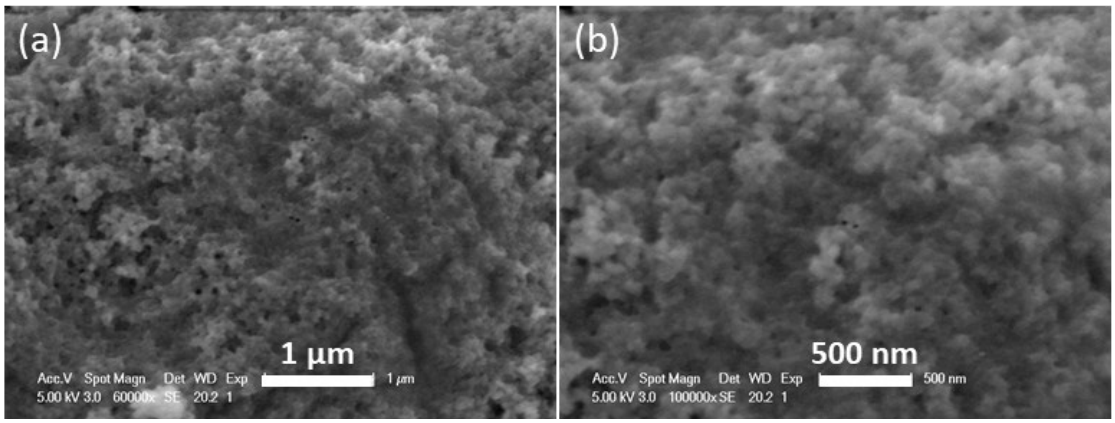

Fig. S9 SEM images of Bi_2S_3@SC hollow nanotubes after tested at a current rate of 1C for 1000 cycles.