## A nanocomposite of SnO<sub>2</sub> and single-walled carbon nanohorns as a long life and high capacity anode material for lithium ion batteries

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**Fig. S1.** Thermal gravimetric analysis (TGA) curve of the SnO<sub>2</sub>/SWCNHs composite obtained at a heating rate of 10 °C/min between 30 and 900 °C.



**Fig. S2.** The energy dispersive spectroscopy (EDS) spectrum of the SnO<sub>2</sub>/SWCNHs composite.



Fig. S3. The first discharge and charge curves of (a) SWCNHs, (b) bare  $SnO_2$  and (c)  $SnO_2/SWCNHs$  composite.



**Fig. S4.** Thermal gravimetric analysis (TGA) curve of the (60% SnO<sub>2</sub>)/SWCNHs composite obtained at a heating rate of 10  $^{\circ}$ C/min between 30 and 900  $^{\circ}$ C.



Fig. S5. Cycling performance of (60% SnO<sub>2</sub>)/SWCNHs electrode at a current density of 500 mA  $g^{-1}$ .



Fig. S6. Discharge and charge profiles of the  $SnO_2/SWCNHs$  composite under various current densities from 100 to 1500 mA g<sup>-1</sup>.