Supporting Information

Facile synthesis of SnO₂ nanocrystals anchored onto graphene nanosheets as the anode material for lithium-ion batteries
Yanjun Zhang, Li Jiang, Chunru Wang*

**Fig. S1** Raman spectra of the as-prepared SnO₂/graphene nanocomposite (red) and graphene oxide nanosheets (black).

**Fig. S2** TG analysis of the as-prepared SnO₂/graphene nanocomposite under air flow with a temperature ramp of 10°C min⁻¹.
**Fig. S3** (a) Nitrogen adsorption/desorption isotherm and (b) Barrett-Joyner-Halenda (BJH) pore size distribution plot of the as-prepared SnO$_2$/graphene nanocomposite.

**Fig. S4** (a) TEM image and (b) XRD pattern of the bare SnO$_2$ nanoparticles. (c) SEM image and (d) XRD pattern of the bulk SnO$_2$ powders.
**Fig. S5** Coulombic efficiency for the electrodes of SnO$_2$/graphene nanocomposite, bare SnO$_2$ nanoparticles and bulk SnO$_2$ powders in the voltage range of 0.01-3.0 V (versus Li$^+$/Li) at a current density of 500 mA g$^{-1}$.

**Fig. S6** Nyquist plots of the electrode made from SnO$_2$/graphene nanocomposite, bare SnO$_2$ nanoparticles and bulk SnO$_2$ powders before cycling obtained by applying a sine wave with amplitude of 10.0 mV over the frequency range 100 kHz-10 mHz.