Supporting Information

NiSnO$_3$ Nanoparticles/Reduced Graphene Oxide Composite with Enhanced Performance as Lithium-Ion Battery Anode

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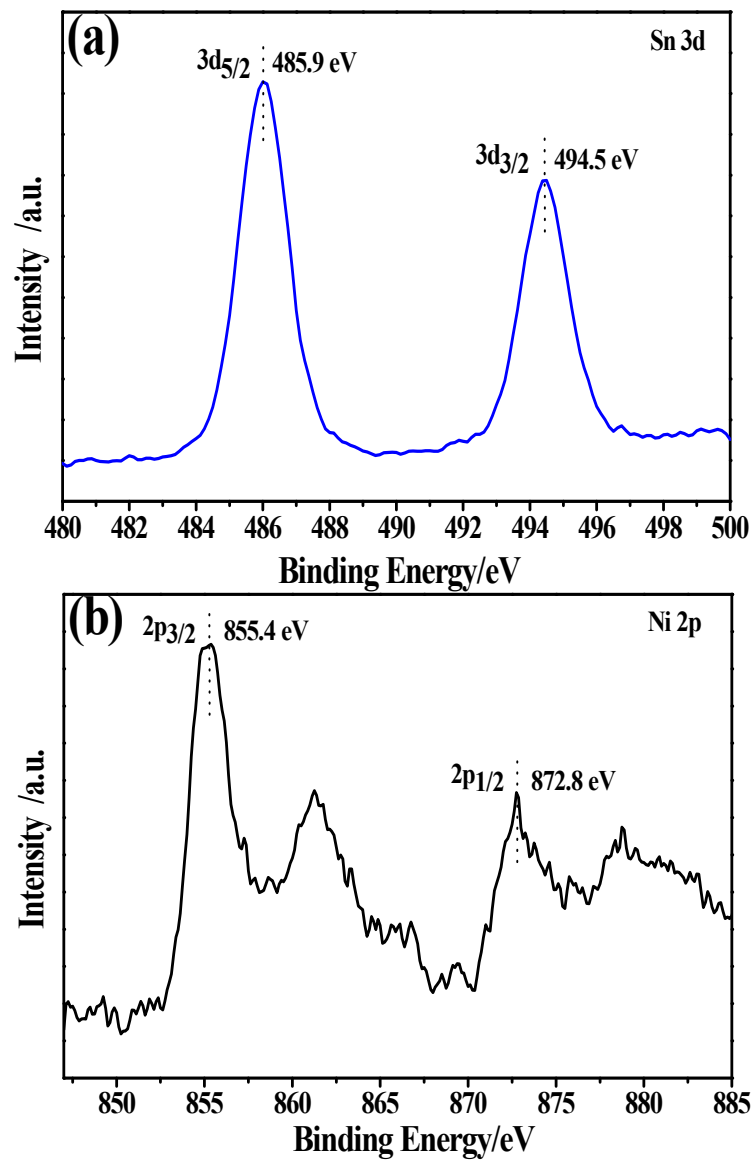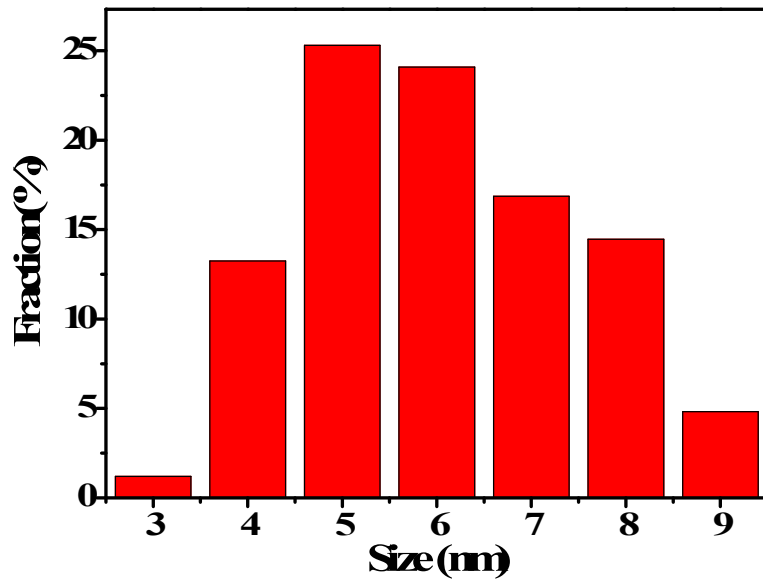
Fig. S1. (a) Sn 3d and (b) Ni 2p XPS of NiSnO$_3$/RGO.

Fig. S2. The particle size distribution picture measured directly from Fig. 2d.
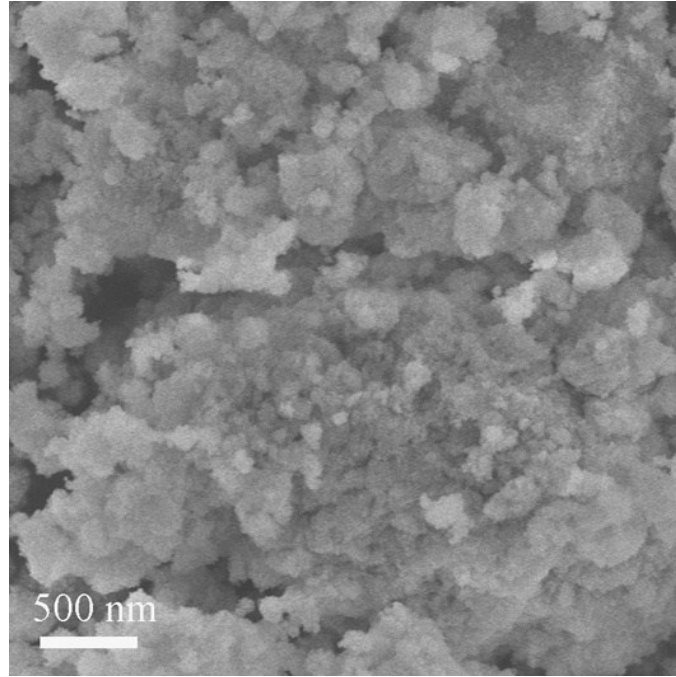
Fig. S3. A representative SEM image of bare $NiSnO_3$ nanoparticles, which shows that

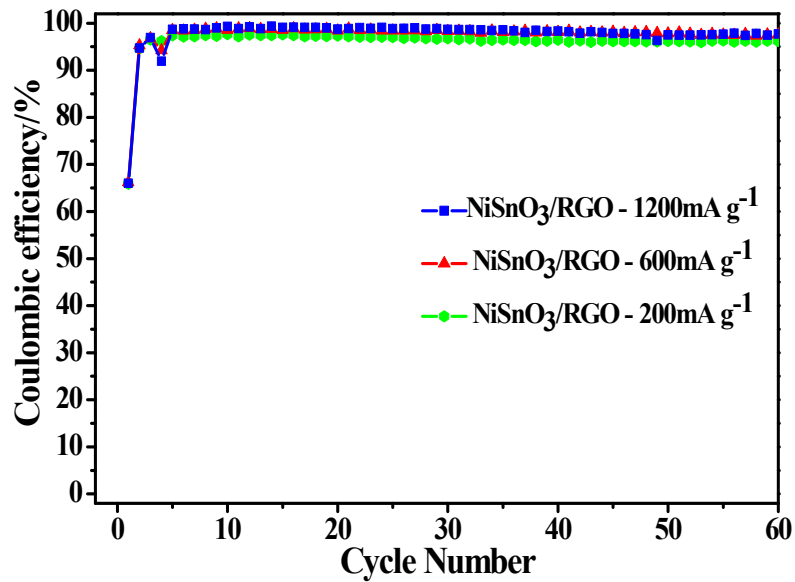most of them stack with each other and tend to aggregate in the absence of RGO.

Fig. S4. The Coulombic efficiencies of $NiSnO_3$/RGO nanocomposites at a current
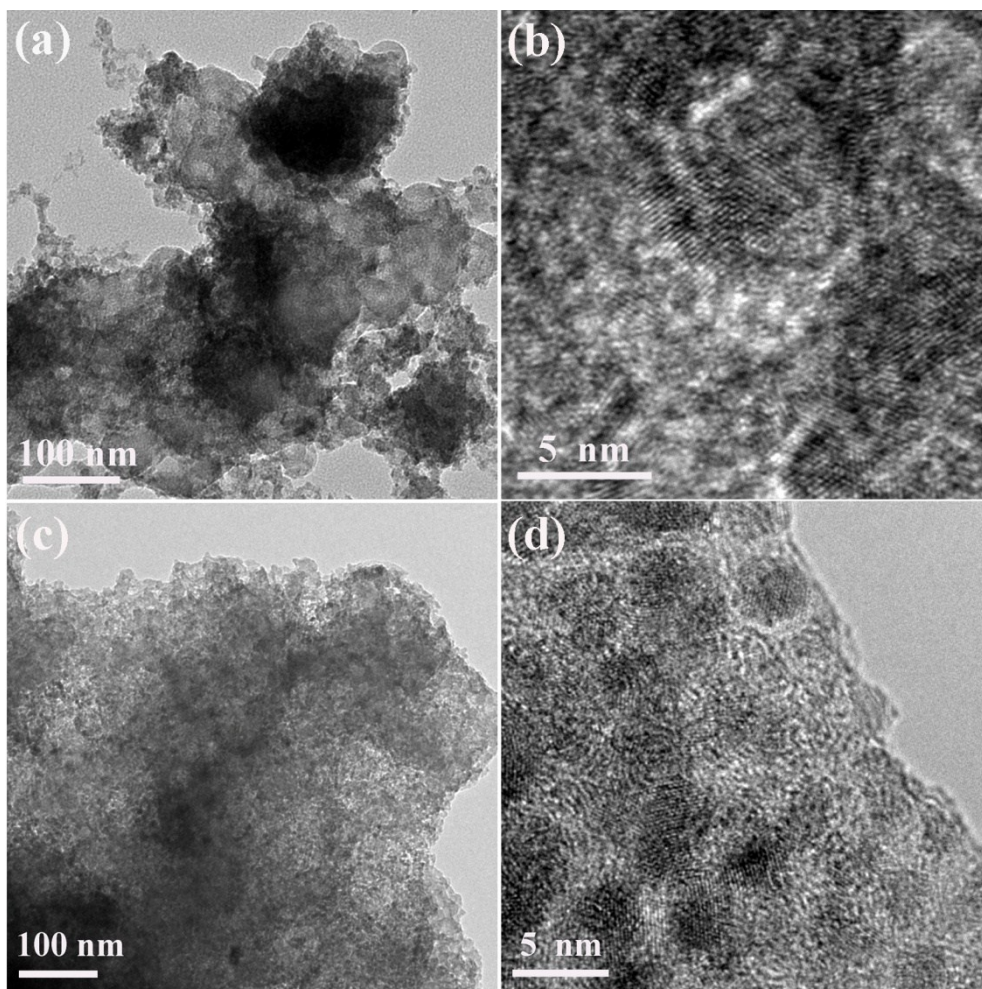
density of 200 mA g^{-1}, 600 mA g^{-1} and 1200 mA g^{-1}.

Fig. S5. TEM images of (a) and (b) NiSnO$_3$, (c) and (d) NiSnO$_3$/RGO electrodes after 60 cycles of charge/discharge test at 600 mA g^{-1}.
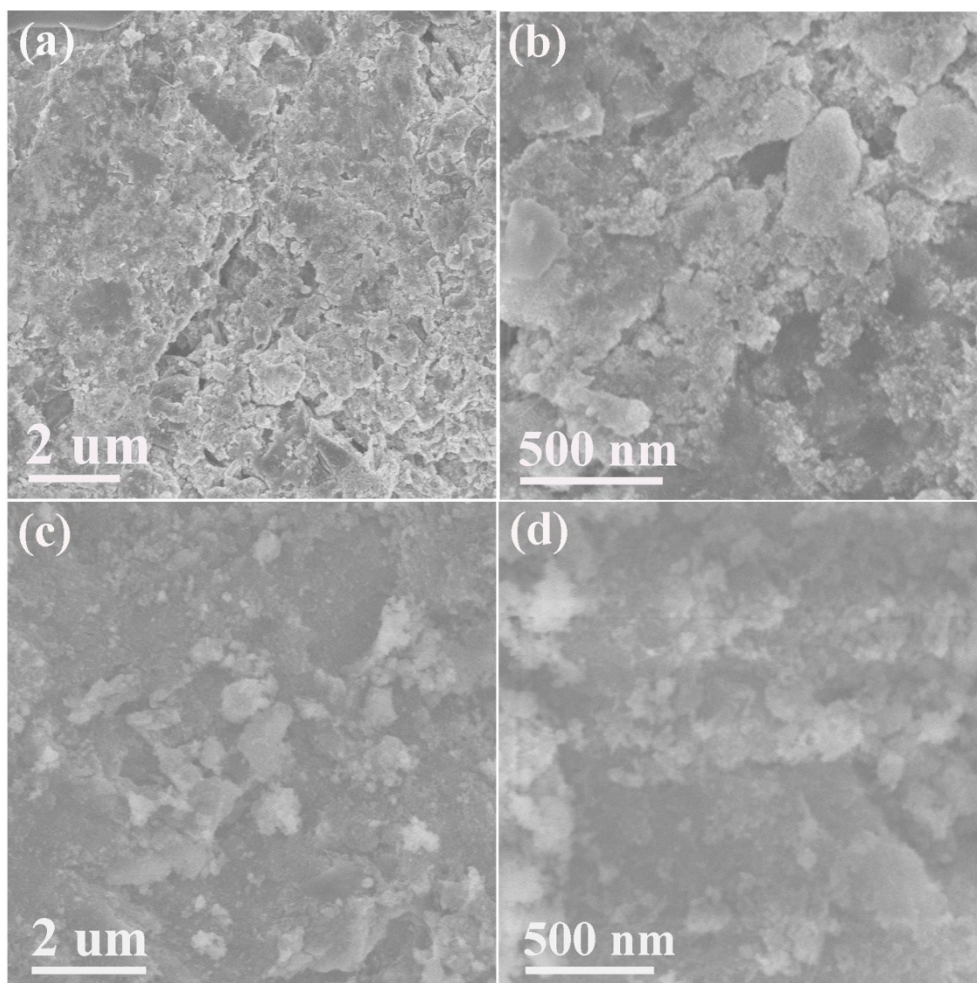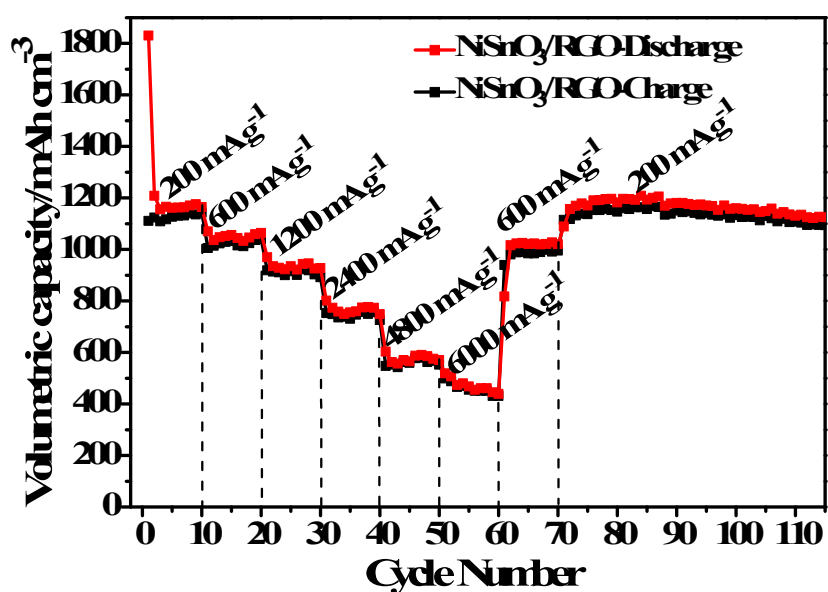
Fig. S6. SEM images of NiSnO₃/RGO electrode in different test stage: (a) and (b) the initial electrode, (c) and (d) the electrode after 30 cycles at various magnifications.

Fig. S7. The volumetric rate capacity of NiSnO$_3$/RGO electrode at various current densities between 200 and 6000 mA g^{-1}.

Table S1 Impedance parameters of NiSnO$_3$/RGO and NiSnO$_3$ electrodes tested after 8 cycles at room temperature.

Electrode	R_e (Ω)	R_s (Ω)	R_{ct} (Ω)
NiSnO$_3$/RGO	16.1	83.0	32.7
NiSnO$_3$	12.9	676.7	163.7