Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Tin-based Materials Supported on Nitrogen Doped Reduced Graphene Oxide towards their Application on Lithium Ion Battery

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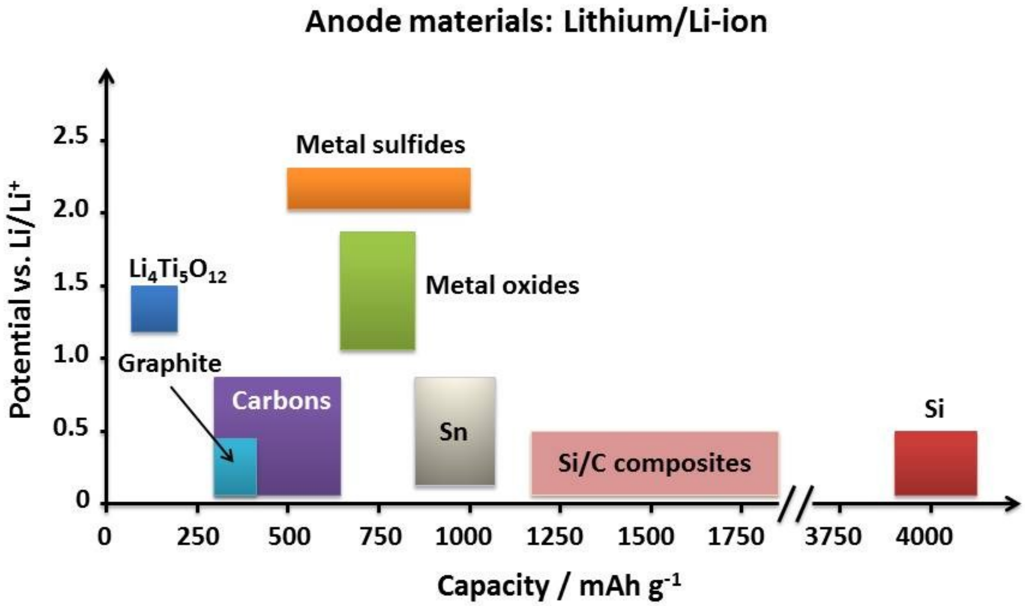

Fig. S1. Schematic illustration of capacity and potential distribution for normal anode materials.

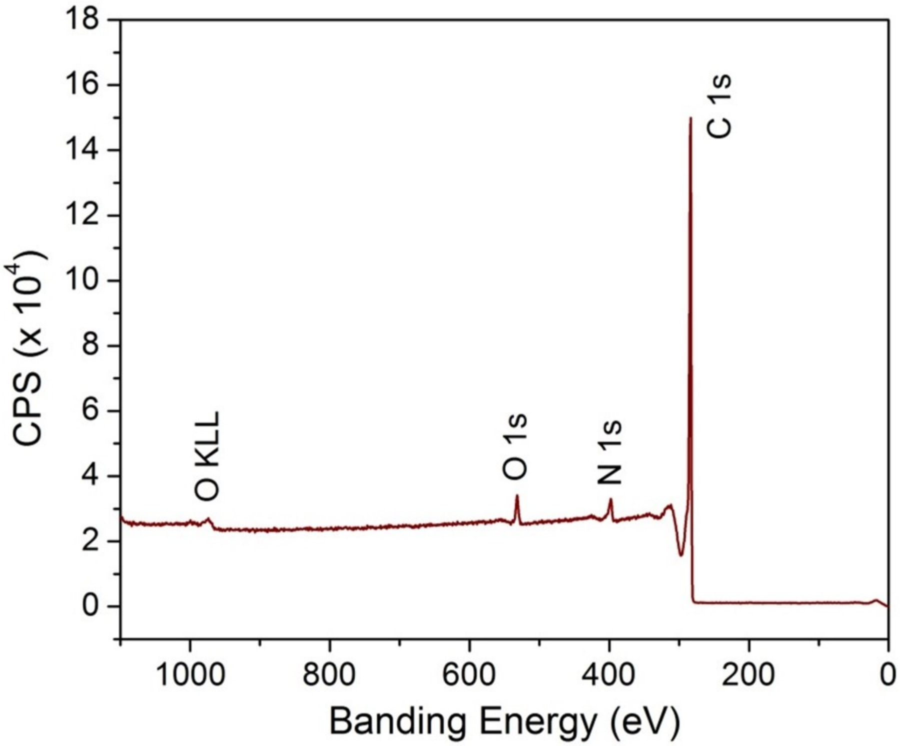

Fig. S2. XPS survey of N-doped rGO.

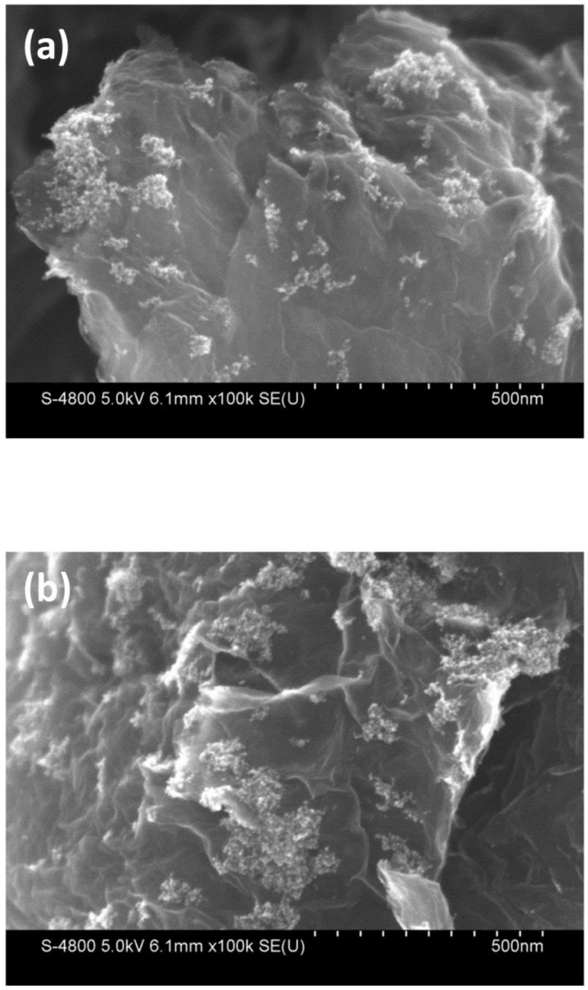

Fig. S3. (a) (b) SEM images of SnO_2/rGO composite. It can be seen that the SnO_2 nanoparticles cannot be uniformly dispersed on the surface of graphene.

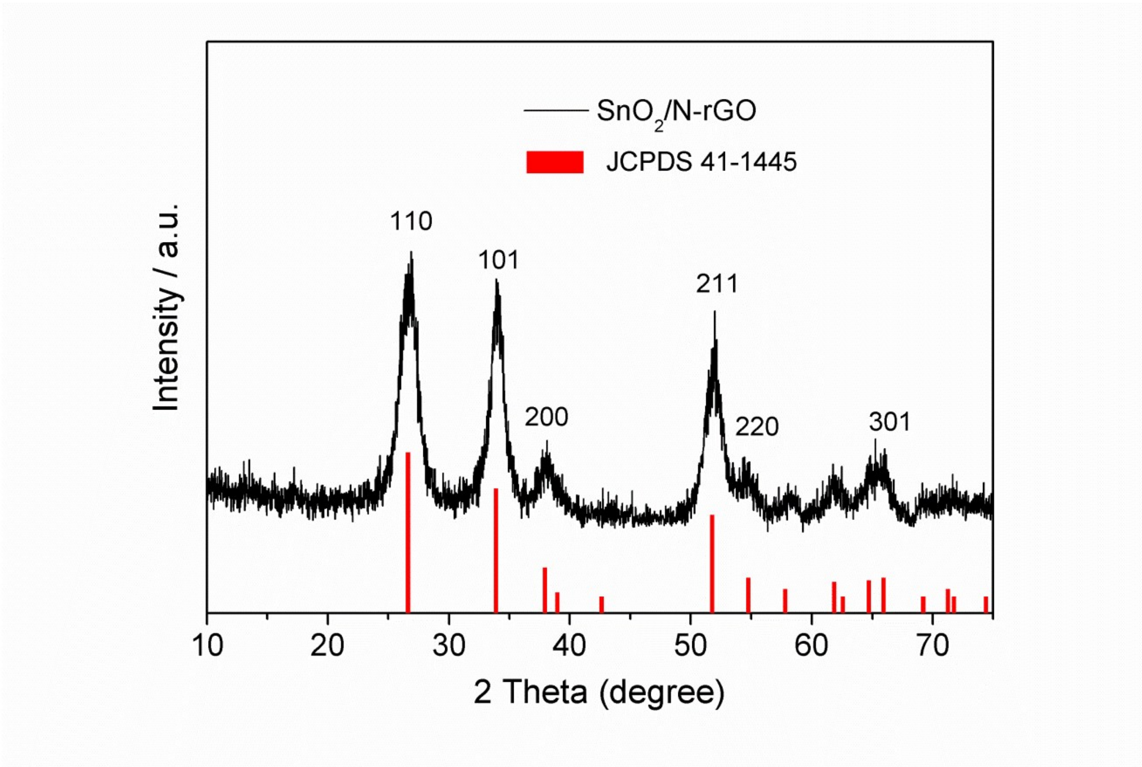

Fig. S4. XRD pattern of SnO_2/N-rGO composites.

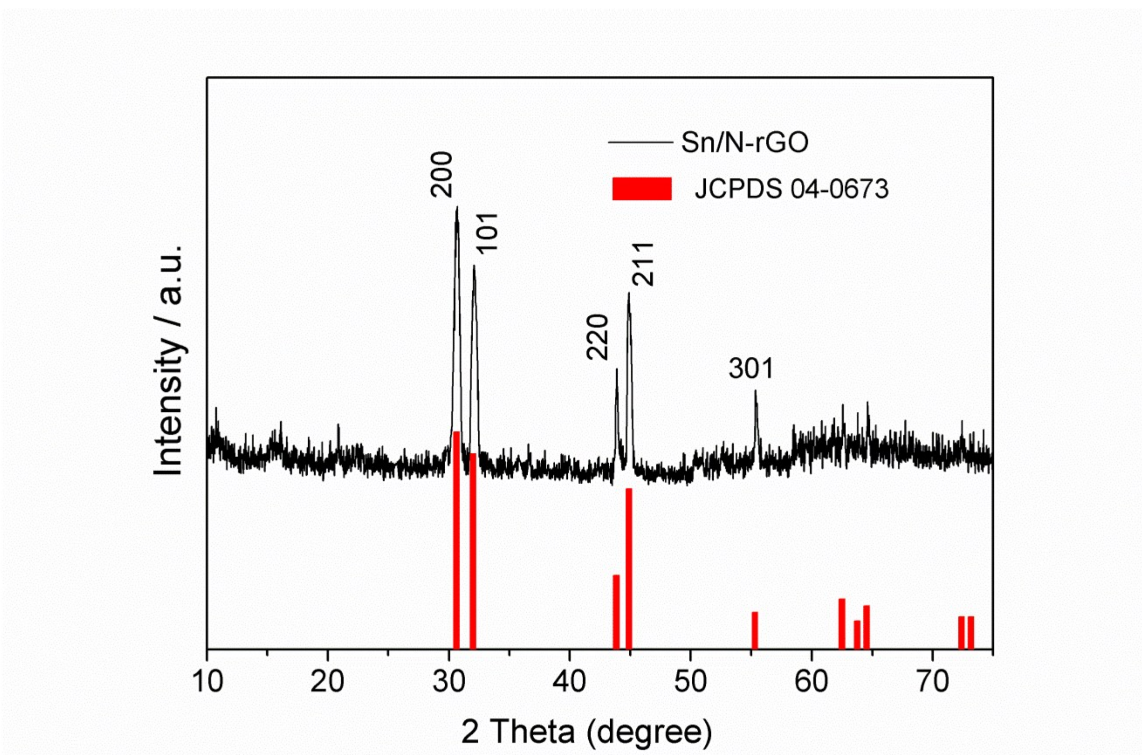

Fig. S5. XRD pattern of Sn/N-rGO composites.

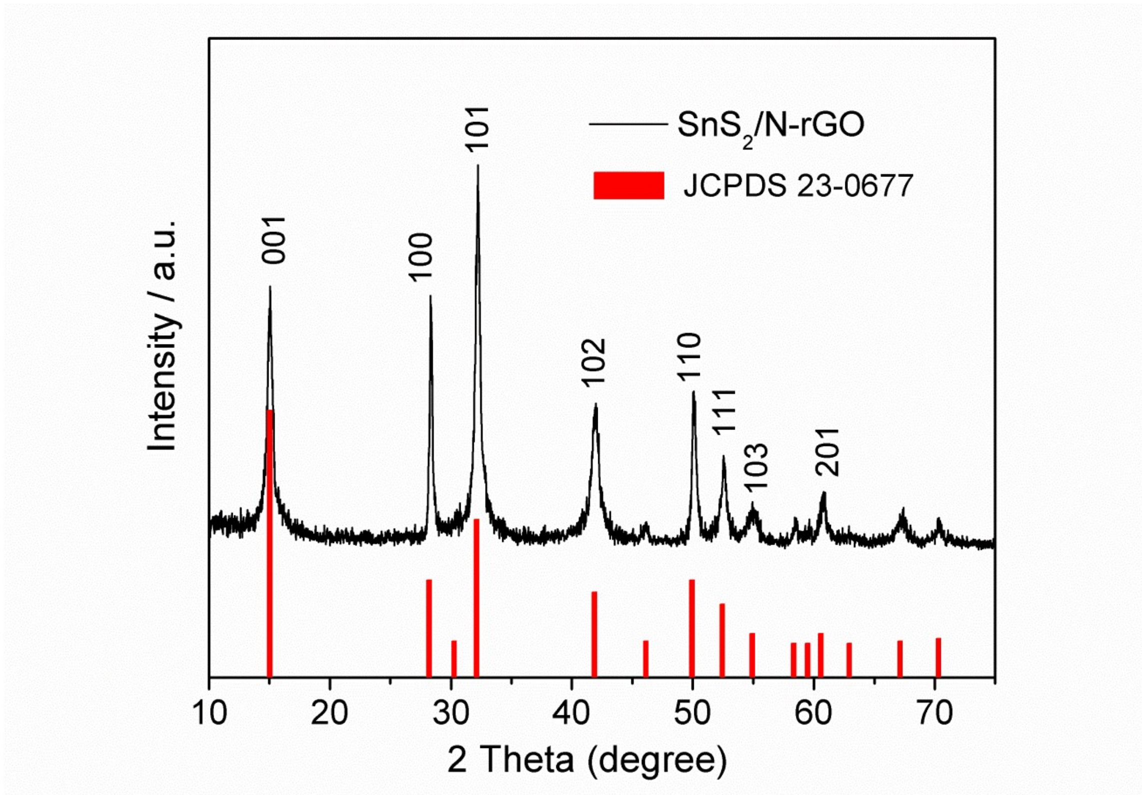

Fig. S6. XRD pattern of SnS_2/N-rGO composites.

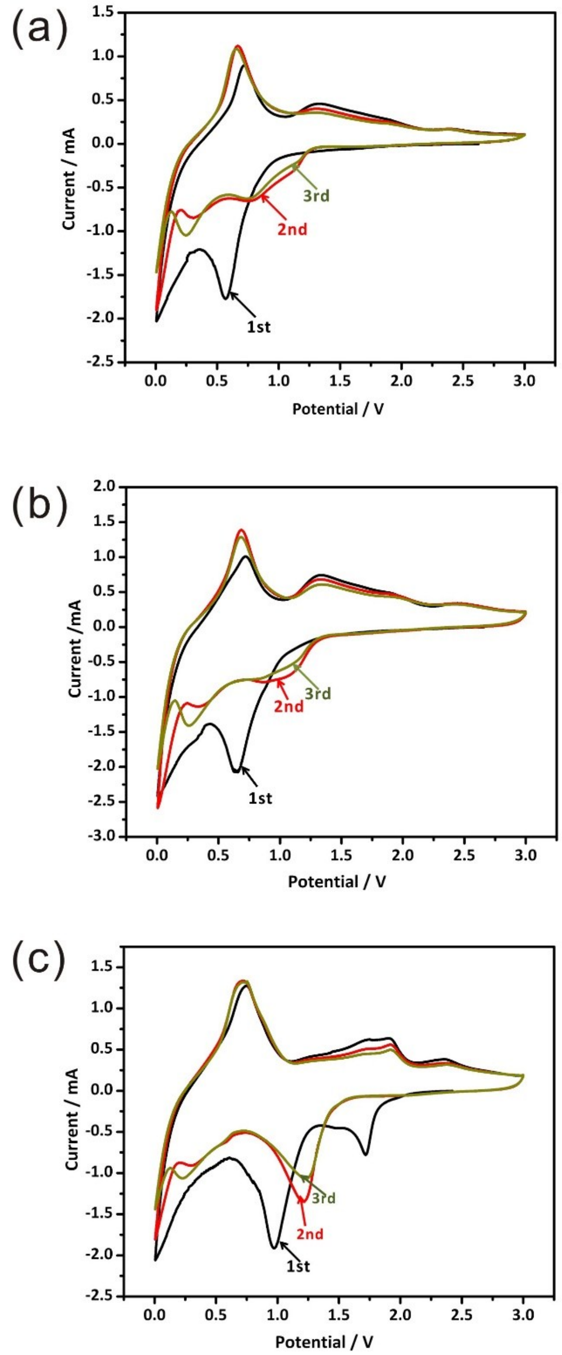

Fig. S7. Cyclic voltammograms curves of Sn-based composites: (a) Sn/N-rGO, (b) SnO_2/N-rGO, and (c) SnS_2/N-rGO.

Table S1. Element Composition of Sn-based N-rGO composites.

Composite	Element	Weight%	Atomic%
Sn/N-rGO	C (K)	3.55	14.64
	O (K)	8.88	32.20
	Sn (L)	87.56	53.16
SnO_2/N-rGO	C (K)	1.79	7.19
	O (K)	20.36	61.25
	Sn (L)	77.84	31.56
SnS_2/N-rGO	C (K)	0.46	2.54
	S (K)	27.16	66.66
	Sn (L)	72.39	30.80