Electronic Supplementary Material (ESI) for Dalton Transactions.

A Novel Route to Prepare N-Graphene/SnO_2 Compositeas a High-Performance Anode for Lithium Battery

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Table S1 A comparison of the reversible capacity of N-G/SnO_2 nanocomposites in this work with other SnO_2/Carbon based nanocomposites.

anode material	discharging current	reversible capacity	references
C/SnO_2	100 mA g^{-1}	958 mAh g^{-1}	[1]
carbon/SnO_2	100 mA g^{-1}	930 mAh g^{-1}	[2]
SnO_2@PANI	100 mA g^{-1}	750 mAh g^{-1}	[3]
C@SnO_2 nanoplates	200 mA g^{-1}	730 mAh g^{-1}	[4]
Graphene/SnO_2	100 mA g^{-1}	930 mAh g^{-1}	[5]
Graphene/SnO_2	200 mA g^{-1}	541 mAh g^{-1}	[6]
Graphene/SnO_2	200 mA g^{-1}	1040 mAh g^{-1}	[7]
Graphene/SnO_2 nanorods	100 mA g^{-1}	815 mAh g^{-1}	[8]
B doped Graphene/SnO_2	100 mA g^{-1}	788 mAh g^{-1}	[9]
N-Graphene/SnO_2 foams	100 mA g^{-1}	1080 mAh g^{-1}	[10]
N-Graphene/SnO_2	100 mA g^{-1}	683 mAh g^{-1}	[11]
N-carbon nanofiber/SnO_2	100 mA g^{-1}	890 mAh g^{-1}	[12]
N-Graphene/SnO_2	100 mA g^{-1}	1117 mAh g^{-1}	This work
	200 mA g^{-1}	1067 mAh g^{-1}	This work

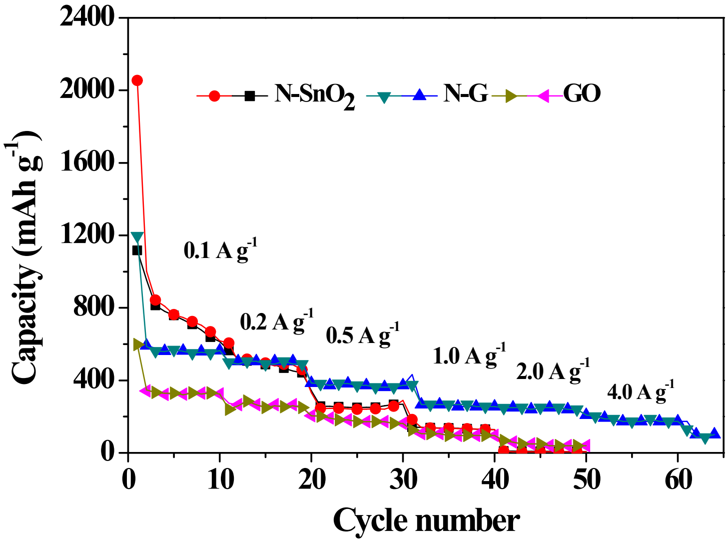

Fig. S1. Rate capacity of N-SnO_2, N-G, and GO samples tested at a series of current densities from 0.1 to 4.0 A g^{-1}, respectively.

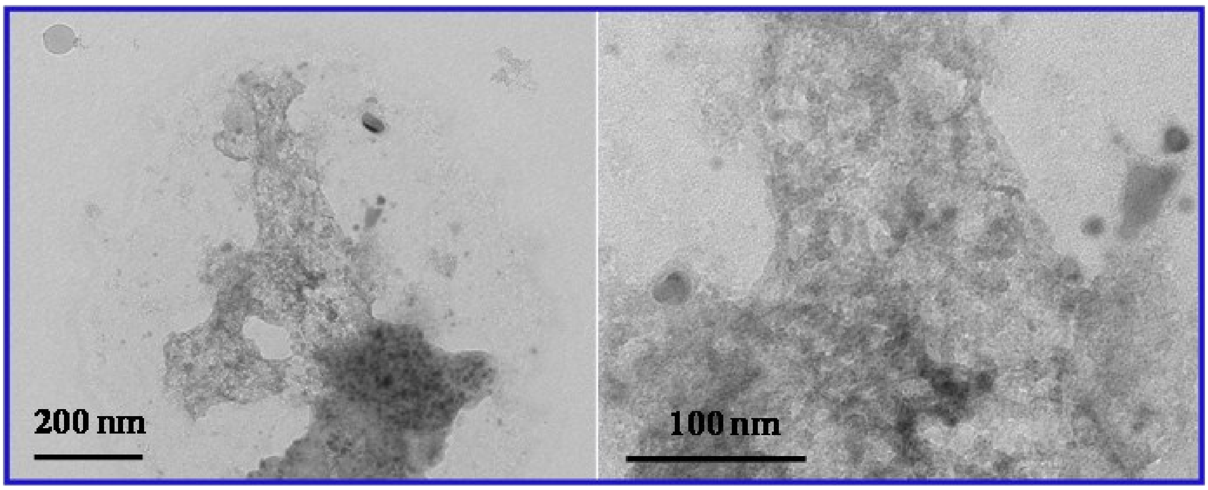

Fig. S2. TEM images of the N-G/SnO_2 composites after 100 cycles at a current density of 500 mA g^{-1} at low−magnification and high−magnification.

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