Electronic Supplementary Information

A comparative investigation on the effects of nitrogen-doping into graphene on enhancing the electrochemical performance of SnO_2/graphene for sodium-ion batteries

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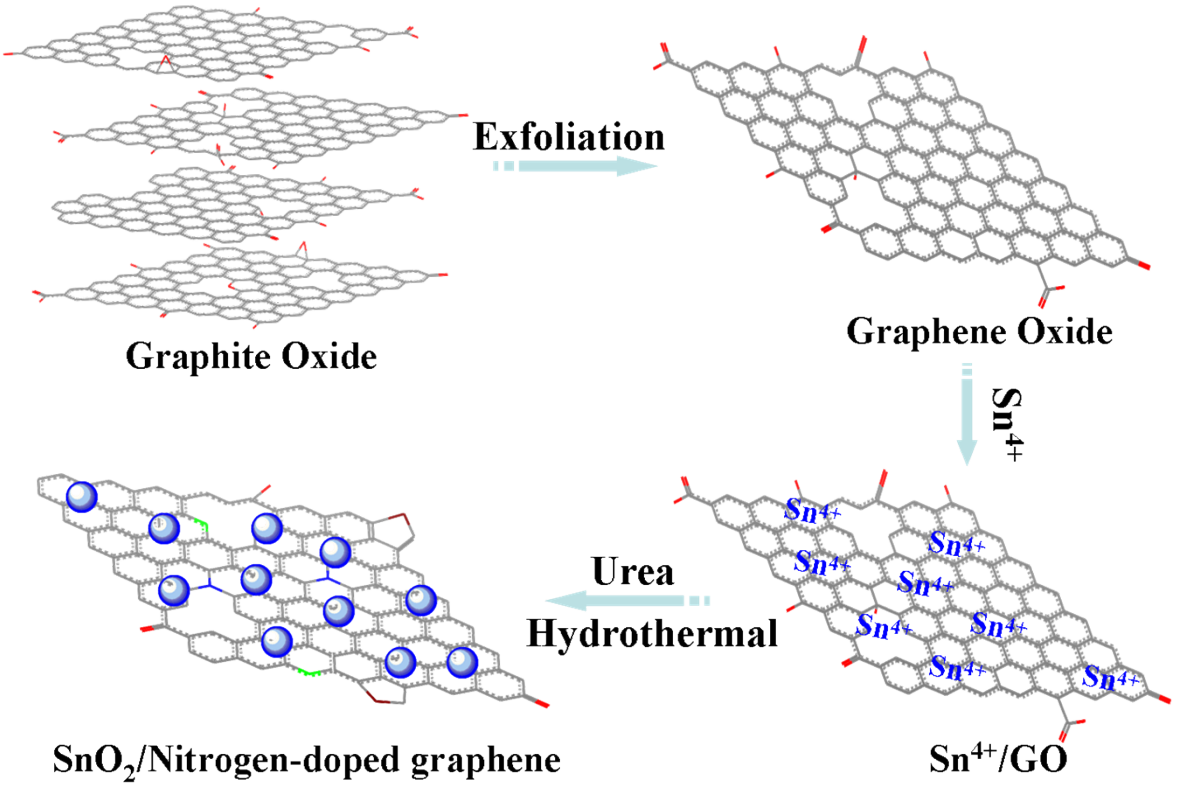

Figure S1. Schematic illustration for the preparation of SnO_2/NG nanohybrids.

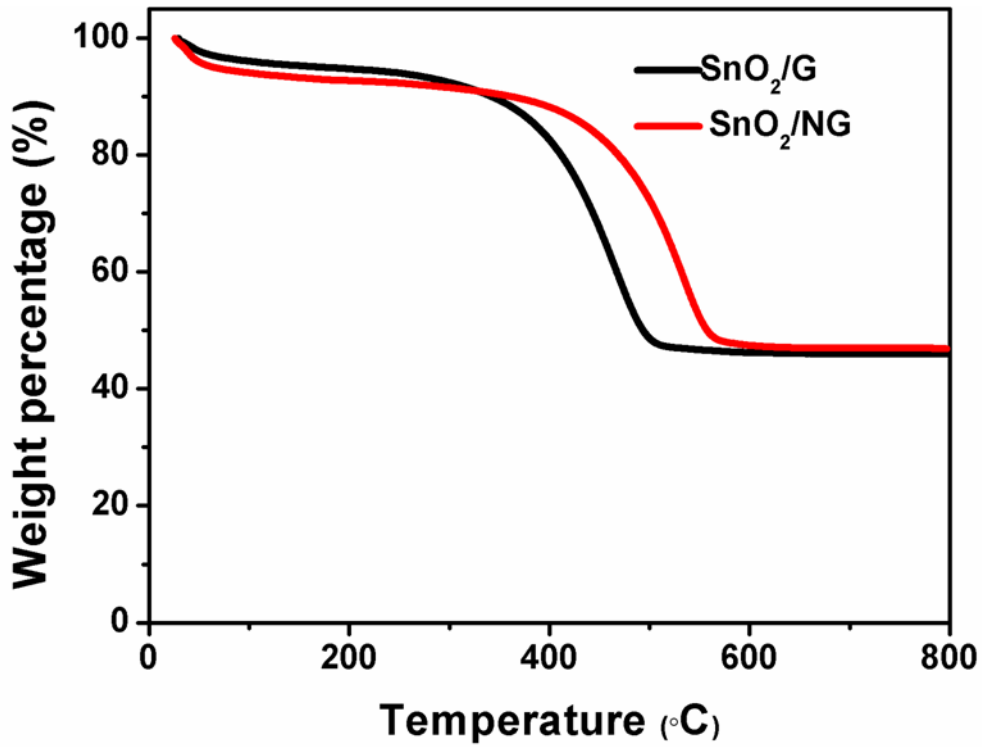

Figure S2. TGA curves of the SnO_2/G and SnO_2/NG.

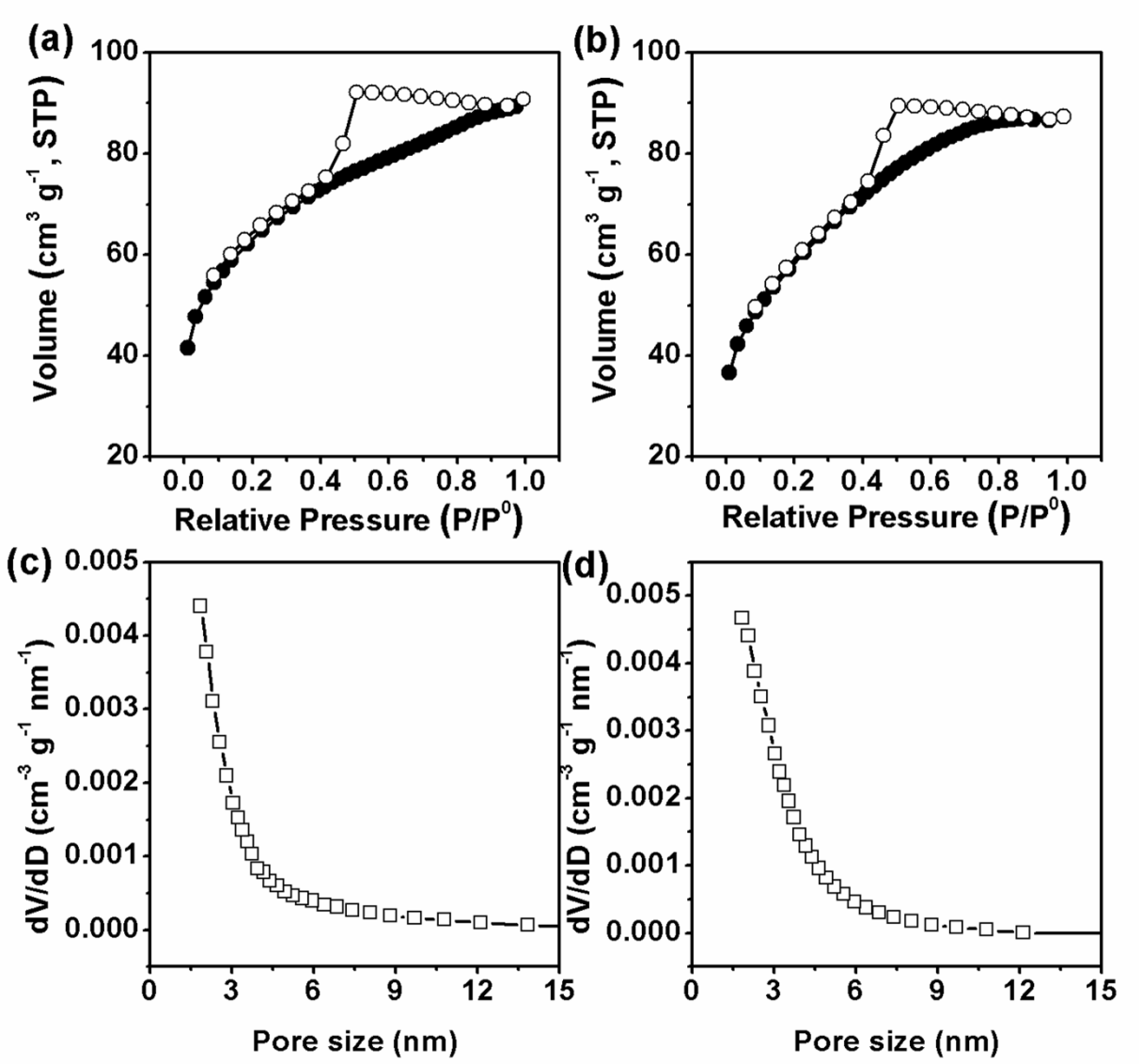

Figure S3. N_2 sorption isotherms of the SnO_2/G (a) and SnO_2/NG composites (b). Pore size distribution of the SnO_2/G (c) and SnO_2/NG composites (d).

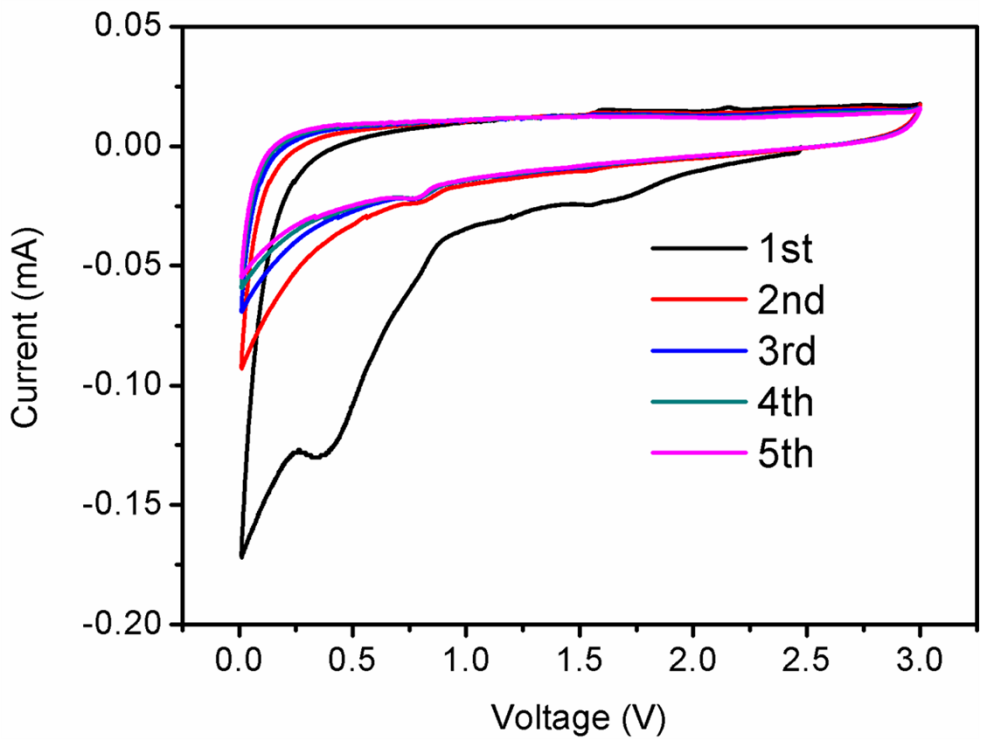

Figure S4. CV profiles of NG at a scan rate of 0.1 mV s^{-1} between 0.01 and 3.0 V.

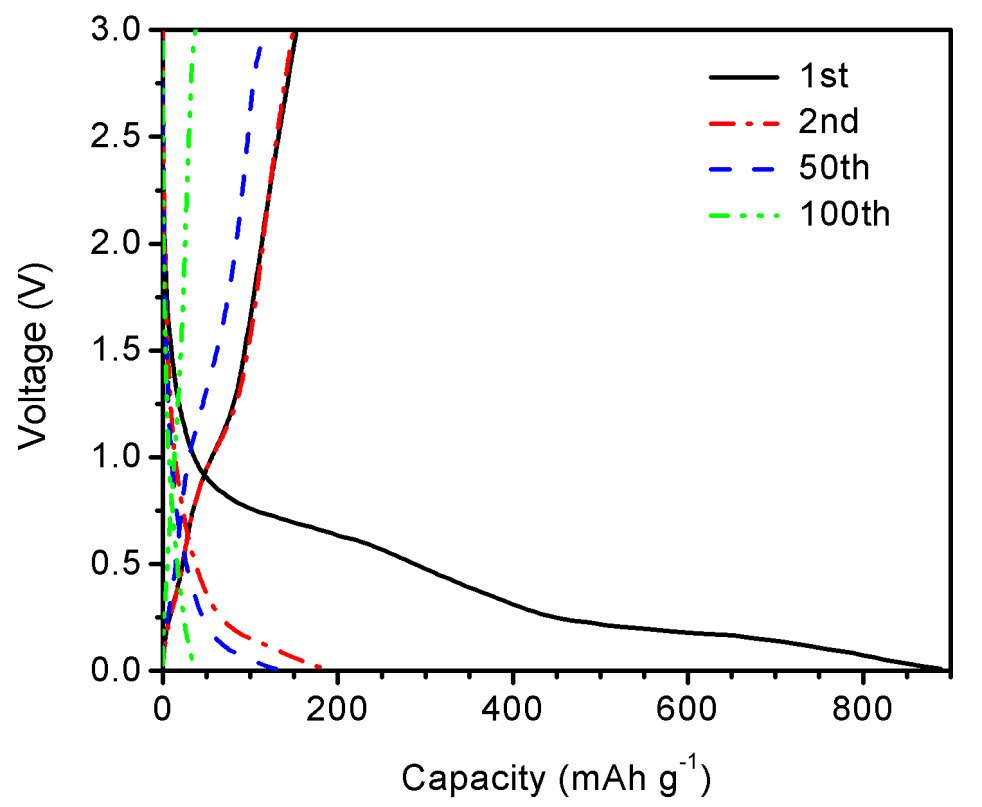

Figure S5. Chare-discharge curves of bare SnO_2 at a current density of 20 mA g^{-1}.

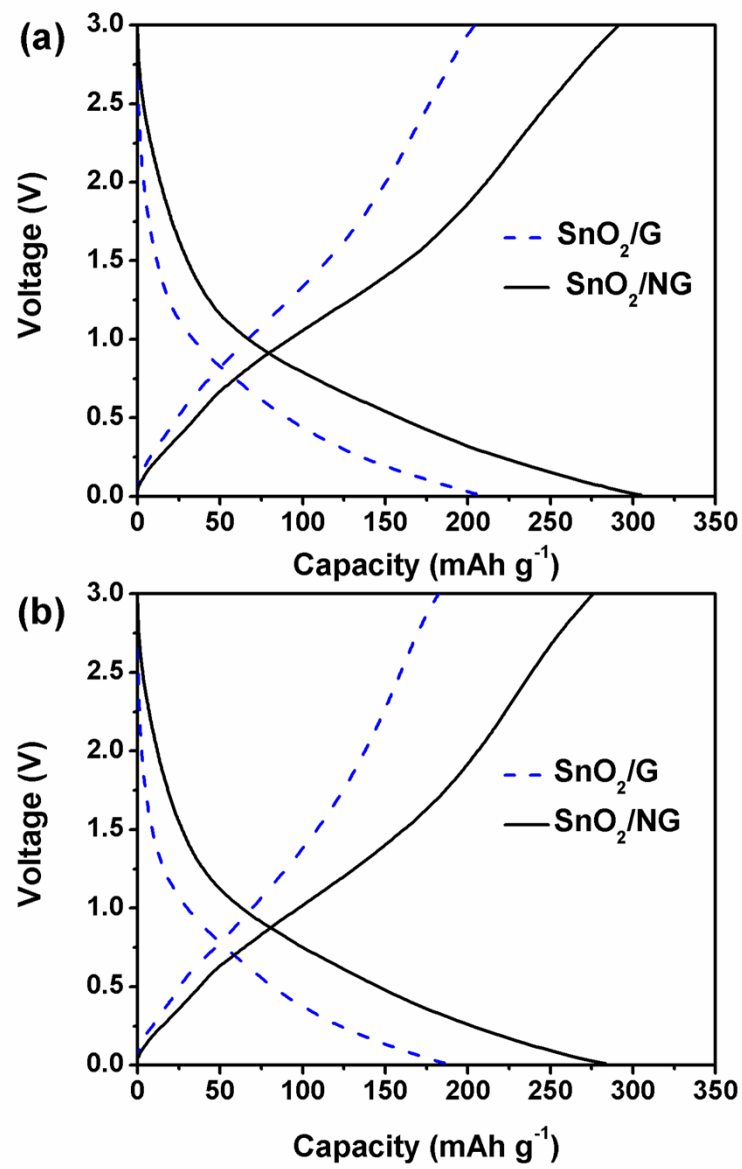

Figure S6. Galvanostatic charge-discharge profiles of the SnO_2/NG and SnO_2/G composites of the 50th cycle (a) and 100th cycle (b) at 20 mA g^{-1}.

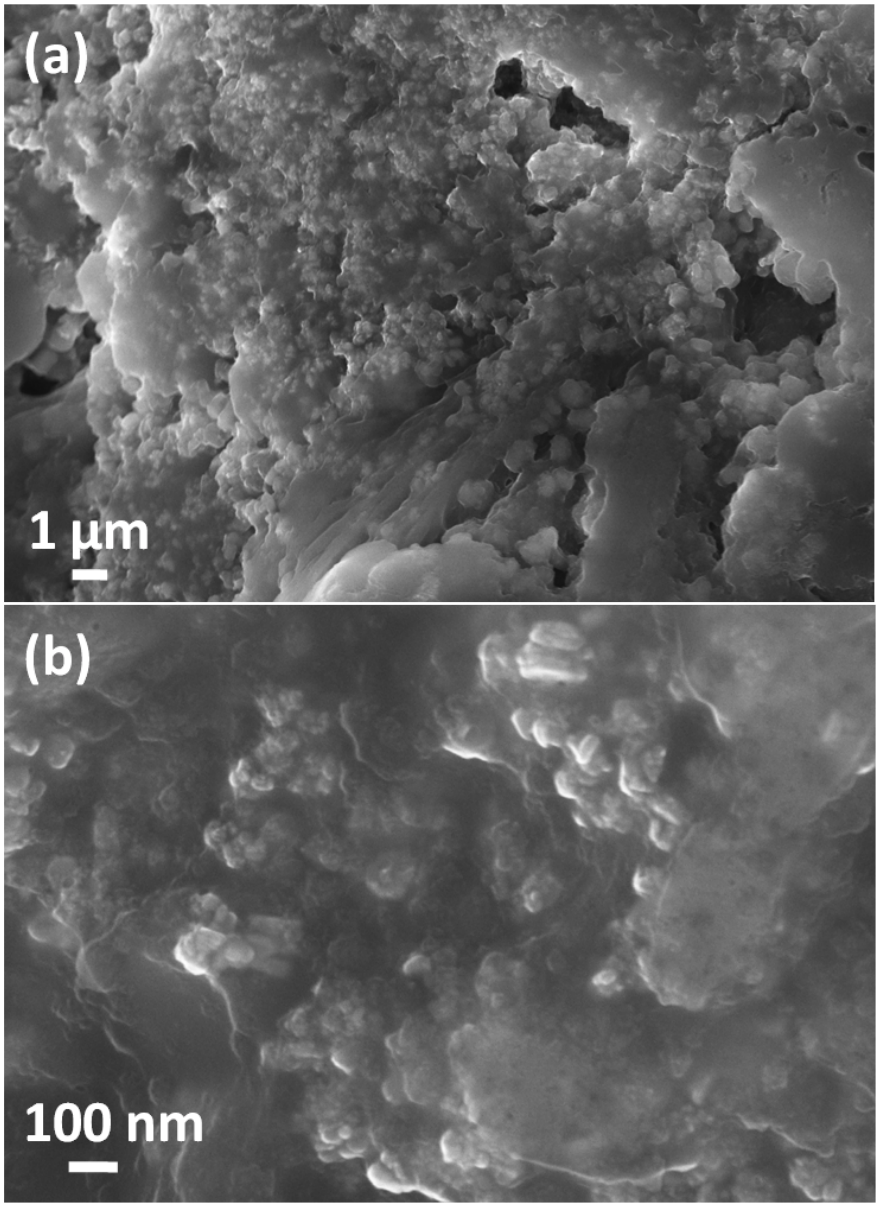

Figure S7. SEM images of SnO_2/NG electrode after 100 cycles.

Table S1. Kinetic parameters of SnO_2/G and SnO_2/NG electrodes.

Electrode	R_e (Ω)	$R_f + R_{ct}$ (Ω)
SnO_2/G	6.6	301.4
SnO_2/NG	4.6	254.8