Electronic Supplementary Material (ESI) for Journal of Materials Chemistry A.

Supporting Information

Enhanced conversion reaction kinetics in low crystallinity SnO_2/CNT anodes for Na-ion batteries

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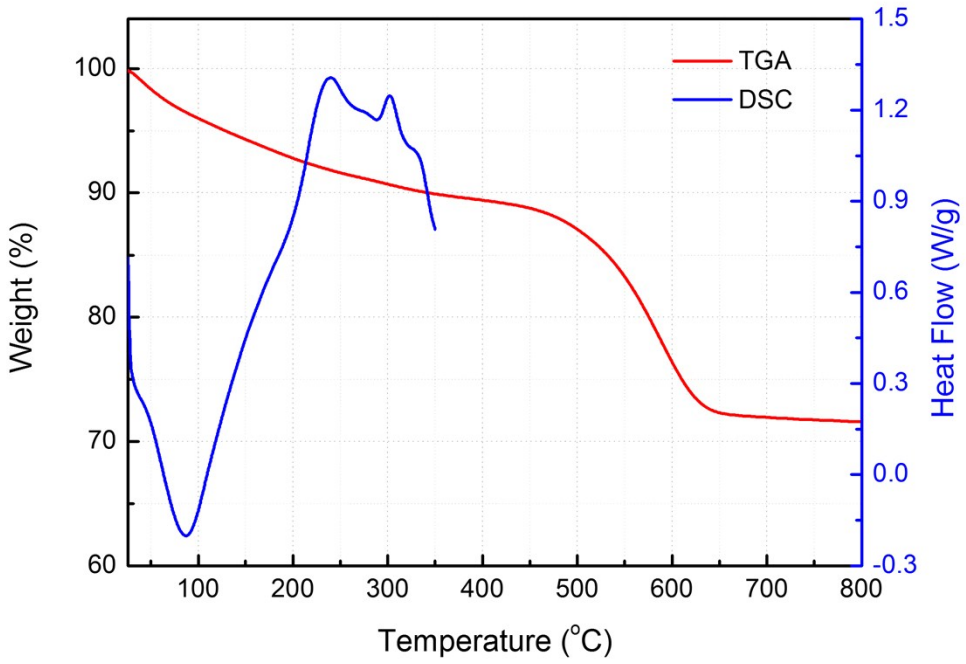

Figure S1 TGA and DSC curves of A-SnO_2/CNT composites.

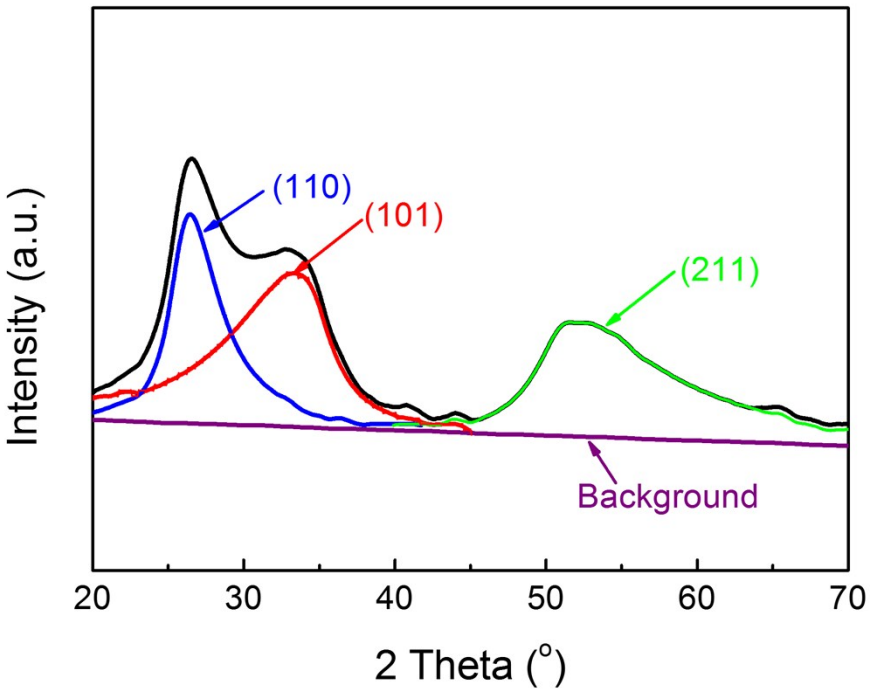

Figure S2 XRD fitting curves of A-SnO_2/CNT composites.

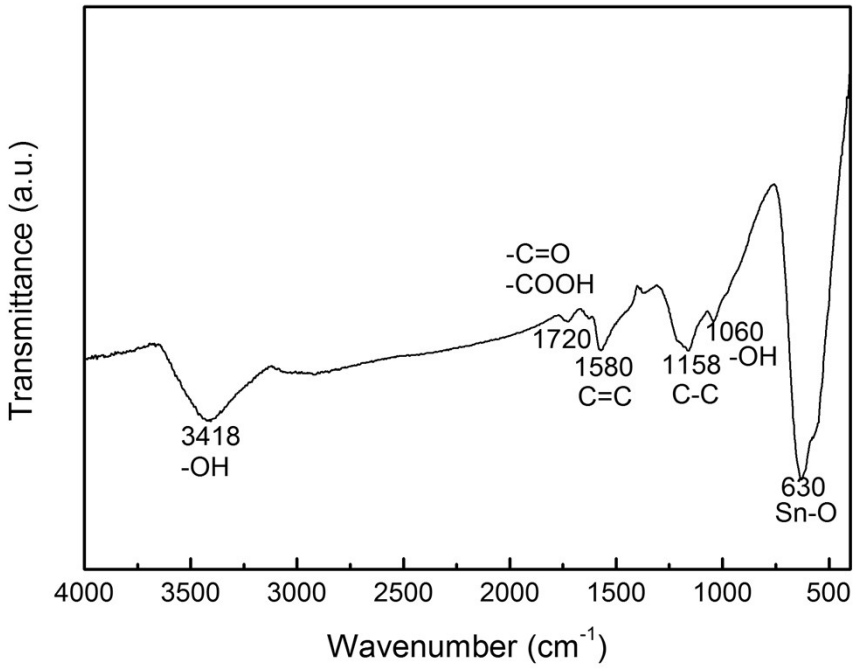

Figure S3 FTIR spectrum of A-SnO_2/CNT electrodes.

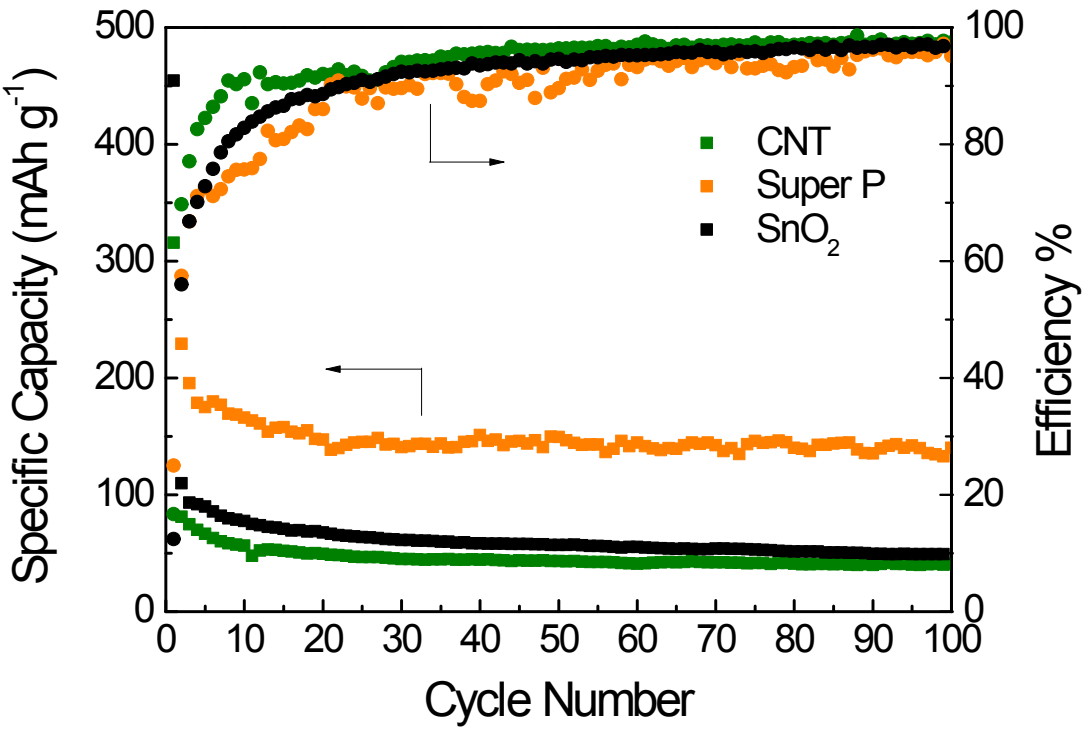

Figure S4 Cyclic performance of pure CNT, Super P and SnO_2 under current density of 0.1 A g^{-1}.

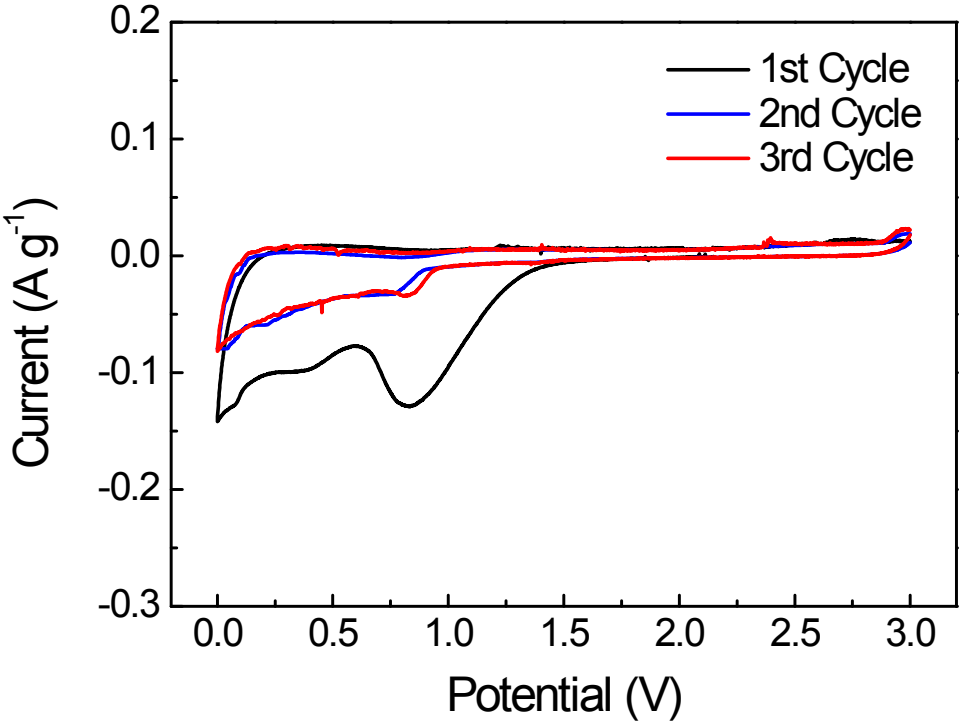

Figure S5 CV curves of pure CNT electrodes at a scan rate of 0.1 mV s^{-1}.

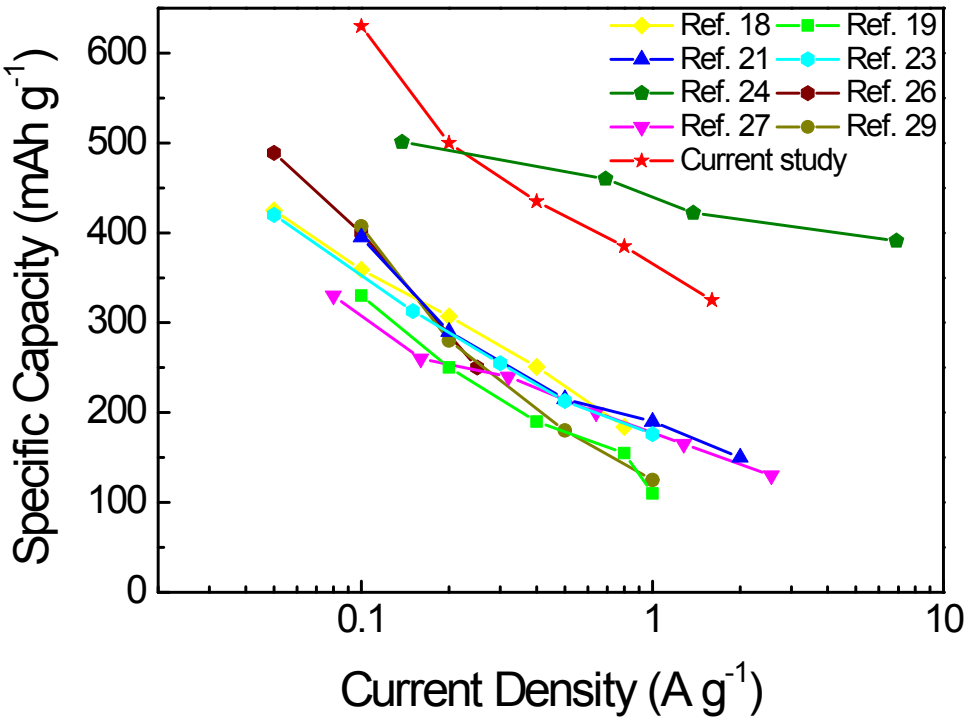

Figure S6 Comparison of specific capacities between the current A-SnO_2/CNT and SnO_2-based anodes taken from the literature.

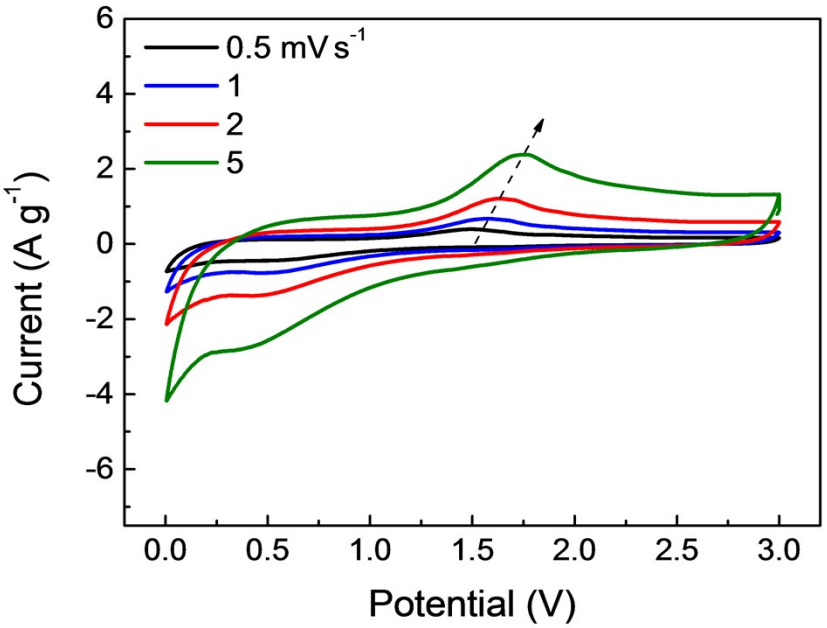

Figure S7 CV curves of C-SnO_2/CNT electrodes at different scan rates.

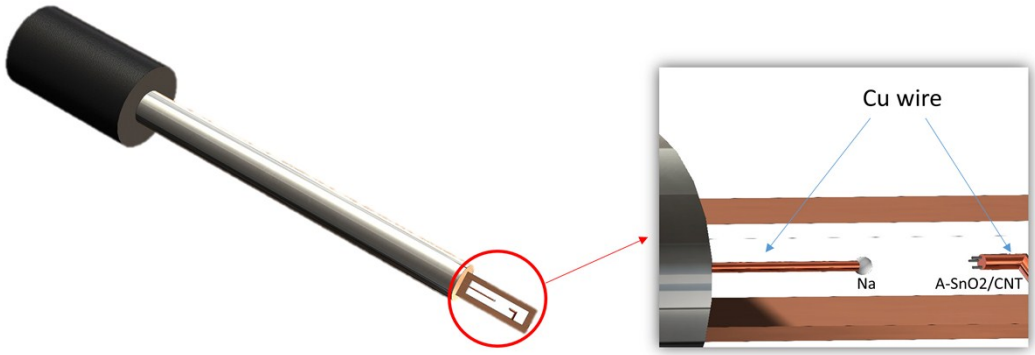

Figure S8 Schematic illustration of *in situ* electrochemical test setup.

Table S1 Comparison of cyclic performance of SnO_2-based anodes in SIBs.

Materials	Initial reversible capacity		Cyclic performance		Ref.
	Specific capacity (mAh g^{-1})	Current density (A g^{-1})	Specific capacity (mAh g^{-1})	Cycle Number	
PCNF/SnO_2/C	452	0.05	374	100	18
SnO_2/PANI	~280	0.05	214	400	19
SnO_2/C	412	0.05	239	50	20
SnO_2/G aerogel	380	0.05	221	200	21
SnO_2/CNT/C	452	0.05	200	300	23
C/SnO_2/CC	522	0.134	313	100	24
SnO_2/MWCNT	489	0.05	352	50	26
SnO_2/C	531	0.08	430	200	27
SnO_2 thin film	300	0.1	200	100	28
SnO_2/rGO	407	0.1	330	150	29
SnO_2/CNT	630	0.1	453	100	Current study
	324	1.6	223	300	