Supporting Information for:

Intermetallic SnSb Nanodots Embedded in Carbon Nanotubes Reinforced Nanofabric Electrodes with High Reversibility and Rate Capability for Flexible Li-ion Batteries

Renpeng Chen,^a Xiaolan Xue,^a Yi Hu,^a Weihua Kong,^a Huinan Lin,^a Tao Chen,^a Zhong Jin^{*ab}

^a Key Laboratory of Mesoscopic Chemistry of MOE, Jiangsu Key Laboratory of Advanced Organic Materials, School of Chemistry and Chemical Engineering, Nanjing University, Nanjing 210023, China.

^b Shenzhen Research Institute of Nanjing University, Shenzhen 518063, China.

* Email Address of corresponding author: <u>zhongjin@nju.edu.cn</u>

other	previously-reported		SnSb	based	anodes.
Ref.	Electrode material	Voltage range (V)	Current density (mA g ⁻¹)	Cycle number	Specific capacity (mAh g ⁻¹)
This	SnSb-CNTs@NCNFs	0.01–3.0	100	100	815
work			2000	1000	451
28	SnSb-C	0.01-2.5	100	120	672.2
29	SnSb@C/C	0.02–2.7	50	50	~480
30	SnSb/C nanofibers	0.02-2.7	50	100	686
31	PNS@SnSb	0.01–2.0	2000	100	580
32	SnSb/graphene	0.005–2	500	75	468
33	SnSb-TiC-C	0–2	100	100	392
34	SnSb-C	0.05–2	200	100	590
35	Sn _x Sb-graphene-carbon porous multichannel nanofiber mats	0–2.5	100	500	729
36	SnSb-CNT	0.05-3.0	160	40	860
37	SnSb/MO _x	0–2	100	150	490
38	SnSb/C	0–2	100	300	550

Table S1. Lithium-storage performance comparison of SnSb-CNTs@NCNFs with



Fig. S1 Survey XPS spectrum of SnSb-CNTs@NCNFs.



Fig. S2 (a) TGA profile of SnSb-CNTs@NCNFs under air atmosphere from room temperature to 800 °C. (b) XRD pattern of the powdery residue of SnSb-CNTs@NCNFs after TGA test and the standard XRD patterns of SnO₂ (red lines) and Sb₂O₄ (blue lines).



Fig. S3 Morphology and structure characterizations of the control samples. (a, c) SEM and TEM images of Sn-CNTs@NCNFs; (b, e) SEM and TEM images of Sb-CNTs@NCNFs. (c, f) SEM and TEM images of SnSb@NCNFs.



Fig. S4 Nyquist plots of SnSb-CNTs@NCNFs and SnSb@NCNFs electrodes (a) in fresh cells and (b) after 100 cycles at 100 mA g⁻¹.



Fig. S5 (a) SEM and (b) TEM images of SnSb-CNTs@NCNFs electrodes after 100 cycles at 100 mA g⁻¹.