Supplementary Information

Nanoporous Ni current collectors with cone array supported Sn-Co alloys as anodes for high-performance lithium-ion batteries

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Table S1. A detailed comparison of lithium storage properties of nanoporous Sn-Co alloy electrodes with cone arrays with other various Sn-based composites with different structure designs reported in the literature.

Materials	Structure	Current density (mA cm^{-2})	Reversible capacity (mAh cm^{-2})	Cycles	Capacity retention (%)	Ref.
Sn	nanoparticle	500	1.29	100	35.4	1
$SnO_2/Cu_{10}Sn_3/Cu$	powder	100	0.25	50	45.5	2
Sn-Ni	nanoparticle	0.10	025	200	51	3
Sn	nanoparticle	0.1	0.49	500	52.4	4
SnSb/N-C	nanosheet	0.12	0.32	100	79.6	5
C@Sn@C	nanofiber	0.10	0.14	100	62.2	6
CF/Sn|SnO_2@C	submicron particle	0.28	1.84	50	76.5	7
Co-Sn/Ni	isolated particle	0.70	1.00	85	31.3	8
Co-Sn/Ti	microparticle	0.2	0.10	30	50	9
Sn-Co	nanowire	0.126	0.32	200	80	10
Sn-Co	nanoporous cone array	1	0.89	200	139	Our work

CF: Copper foam.

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