

Supporting Information:

Two-dimensional SnS₂@PANI nanoplates with high capacity and excellent stability for lithium-ion batteries

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S1. Specific capacities of tin sulfide based materials as anode materials for LIBs

Table S1 Specific capacities of tin sulfide based materials as anode materials for LIBs

Materials	Morphology	Performance	Rate	Ref.
SnS ₂	Nanoplates	583 mAh g ⁻¹ (30 th)	323 mA g ⁻¹	3
SnS ₂	flower-like	387 mAh g ⁻¹ (50 th)	100 mA g ⁻¹	19
SnS ₂	microspheres	570.3 mAh g ⁻¹ (100 th)	650 mA g ⁻¹	21
SnS ₂	Nanoplates	521 mAh g ⁻¹ (50 th)	100 mA g ⁻¹	22
SnS ₂	nanosheet	~500 mAh g ⁻¹ (50 th)	323 mA g ⁻¹	23
SnS ₂	hierarchitectures	549.5 mAh g ⁻¹ (100 th)	100 mA g ⁻¹	20
carbon-coated SnS ₂	nanoparticles	668 mAh g ⁻¹ (50 th)	50 mA g ⁻¹	7
SnS ₂ NS@MWCNTs	nanocables	~450 mAh g ⁻¹ (50 th)	100 mA g ⁻¹	8
SnS ₂ @RGO	Nanocrystal	564 mAh g ⁻¹ (60 th)	0.2C	17
SnS ₂ / RGO	Nanoplates	1005 mAh g ⁻¹ (200 th)	100 mA g ⁻¹	10
SnS ₂ nanocrystals@RGO	Nanocrystal	1034 mAh g ⁻¹ (200 th)	0.1C	4
SnS ₂ /G-As	Nanoplates	656 mAh g ⁻¹ (30 th)	50 mA g ⁻¹	11
SnS ₂ @graphene	nanocable	720 mAh g ⁻¹ (350 th)	200 mA g ⁻¹	15
SnS ₂ /graphene	Few-layer	920 mAh g ⁻¹ (30 th)	100 mA g ⁻¹	9
SnS _x -graphene	Nanocrystal	860 mAh g ⁻¹ (150 th)	0.2C	16
SnS ₂ @graphene	Nanosheet	504 mAh g ⁻¹ (200 th)	0.5C	12
SnS ₂ /graphene	Nanosheet	1114 mAh g ⁻¹ (30 th)	100 mA g ⁻¹	18
SnS ₂ /graphene	Nanoplates	704 mAh g ⁻¹ (100 th)	1.6 mA cm ⁻¹ (~0.6C)	14
graphene-SnS ₂	Nanoplates	~650 mAh g ⁻¹ (30 th)	50 mA g ⁻¹	13
SnS ₂ @PANI	Nanoplates	730.8 mAh g ⁻¹ (80 th)	100 mA g ⁻¹	This work

S2. SEM images of (a) pristine SnS₂ and (b) SnS₂@PANI nanoplates after 50 cycles

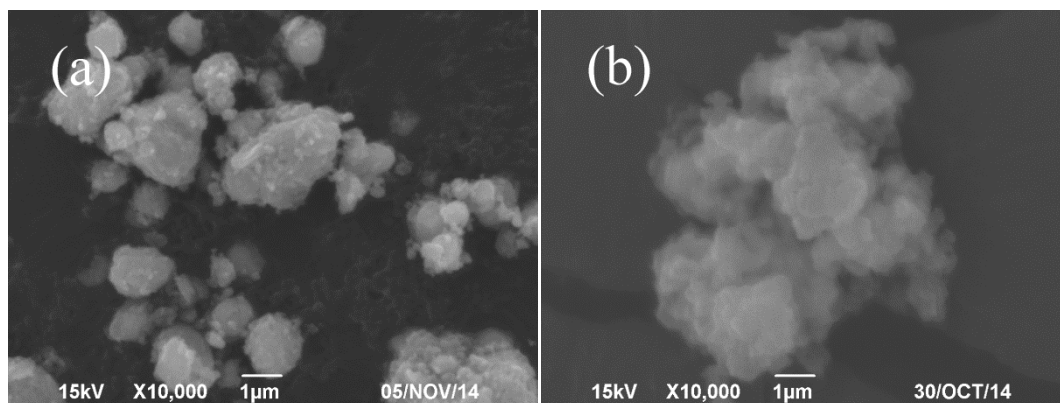


Figure S1 SEM images of (a) pristine SnS₂ and (b) SnS₂@PANI nanoplates after 50 cycles at a current density of 100 mA g⁻¹.