

Supporting Information

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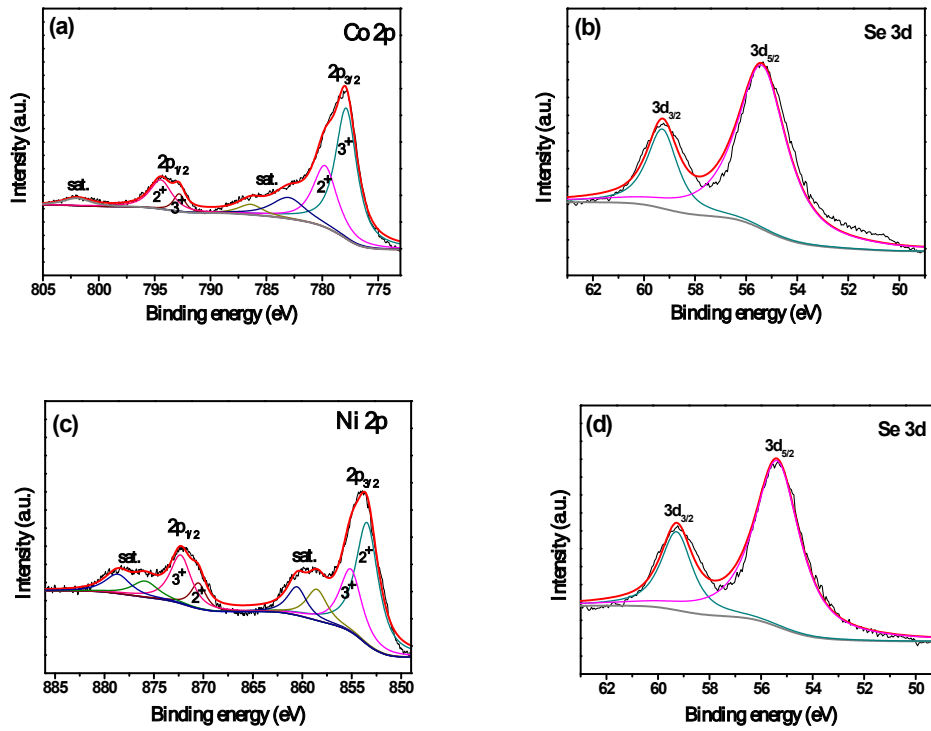


Fig.S1.high resolution XPS spectra:(a) Co 2p and (b) Se 3d of CoSe₂/CNT, (c) Co 2p and (d) Se 3d of NiSe₂/CNT.

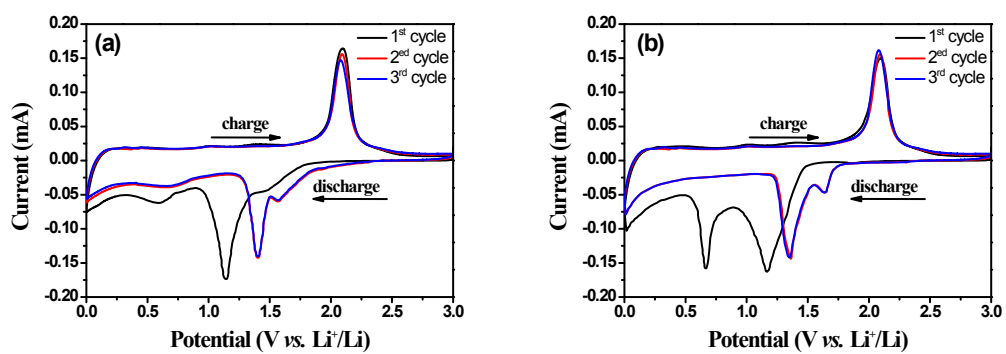


Fig.S2. Representative CV curves of (a) CoSe₂/CNT and (b) NiSe₂/CNT.

Table S1 Electrochemical performances comparison of this work versus the reported transition-metal chalcogenide based anode materials for LIBs.

Materials	Current density	Cycles	Capacity (mAh/g)	Reference
Ni-Co-Se/CNT	0.5 A/g	100	687.8	This work
CoSe@PCP	0.2 A/g	100	675	1
Co _{0.85} Se Nanosheet	0.1 A/g	50	516	2
CoSe@C Hollow box	0.2 A/g	100	860	3
NC/CoS ₂ -650	0.1 A/g	50	560	4
Worm-like CoS ₂	0.1 A/g	100	883	5
Yolk-shell CoS ₂ @NG	0.1 A/g	150	621	6
Ni ₃ Se ₂	0.5 A/g	100	626.7	7
NiSe/C Core-shell sphere	0.1 A/g	50	428	8
NiSe ₂ /C Nanoplate	1 A/g	100	428	9
NiSe Thin film	0.1 A/g	200	314.9	10
NiS ₂ @CoS ₂ @C@C nanocubes	0.1 A/g	100	680	11
MoSe ₂ /C Sheet	0.1 A/g	100	150	12
MoSe ₂ @C Hollow sphere	1 A/g	100	681	13
MoSe ₂ /rGO Nanosheet	0.1 A/g	100	715	14
VSe/graphene	0.1 A/g	60	632	15

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