

Supporting Information

Flaky CoS₂ and graphene nanocomposite anode materials for sodium-ion batteries with improved performance

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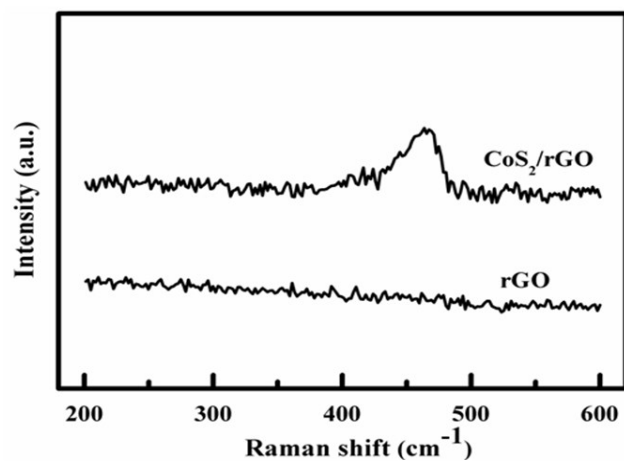


Fig. S1 Raman spectra of CoS₂/rGO and rGO in the range from 200 to 600 cm⁻¹.

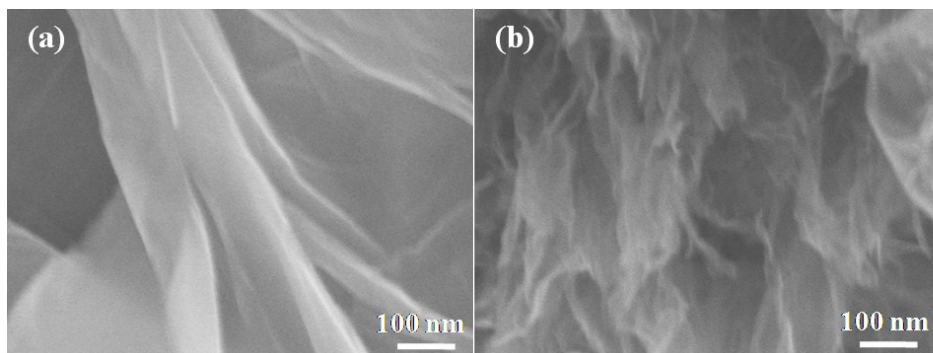


Fig. S2 SEM images of (a) GO and (b) rGO.

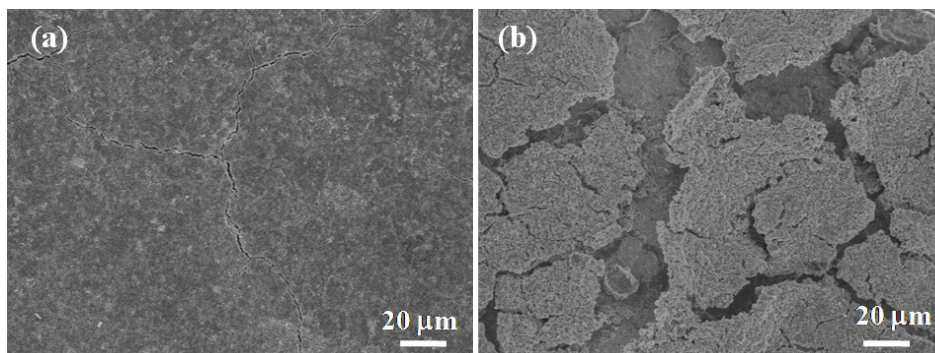


Fig. S3 SEM images of bare CoS₂ electrode (a) before and (b) after cycling 10 cycles at a current density of 0.5 A g⁻¹.

Table S1 Comparison of cycle performance for SIBs with previous work

	Current density (mA g ⁻¹)	Initial discharge capacity (mA h g ⁻¹)	Reversible capacity (mA h g ⁻¹)	Cycles (n)
CoS ₂ /MWCNT ³⁴	100	826	411	100
CoS@rGO ¹⁷	1000	581	420	1000
Co ₃ S ₄ -PNS/GS ²⁰	500	847.3	329	50
H- CoS ₂ ²⁵	1000	726	690	100
cs-Co _x S _y /DPC ¹⁸	500	600	300	50
Co ₉ S ₈ -carbon ¹⁹	500	689	404	50
CoS/rGO ²¹	100	567.3	230.8	100
Our work	1000	661.2	192	1000

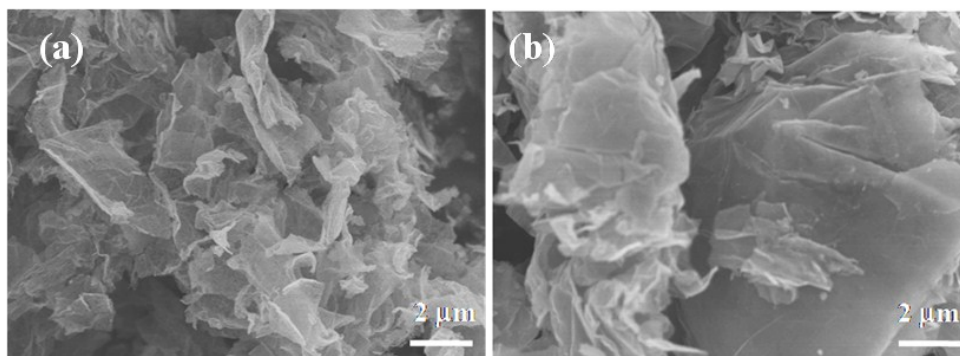


Fig. S4 SEM image of the CoS₂/rGO composites prepared (a) with sonicated GO and (b) with unsonicated GO.

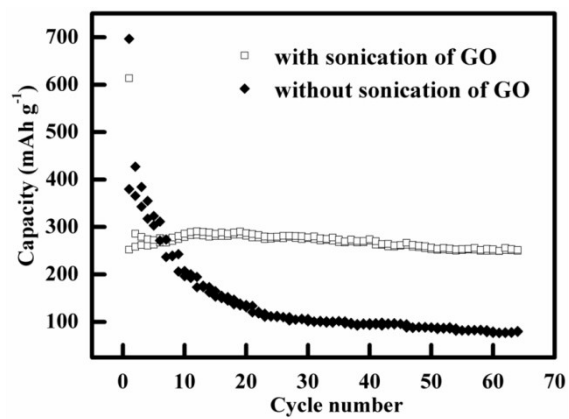


Fig. S5 Cycling performances of the CoS₂/rGO composites prepared with sonication of GO and without sonication of GO at a current density of 0.5 A g⁻¹.