

Supporting Information

The synthesis of hollow MoS₂ nanospheres assembled by ultrathin nanosheets for enhanced energy storage performance

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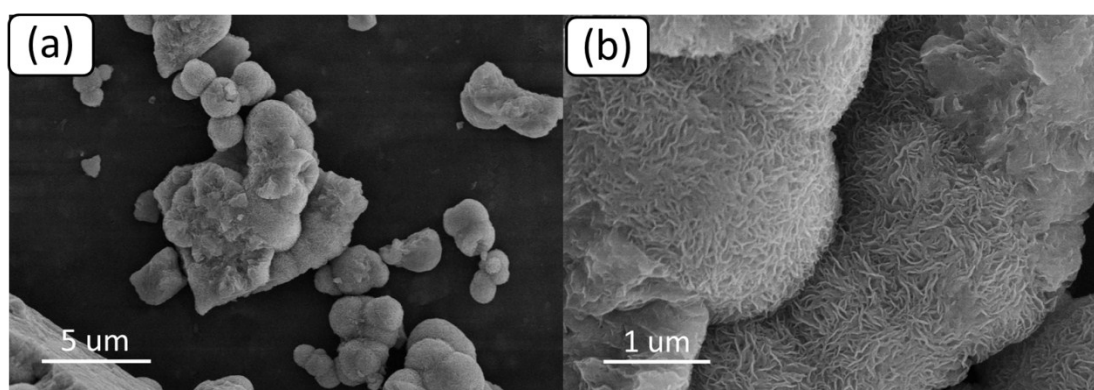


Fig. S1 (a, b) FESEM images of solid MoS₂ sample.

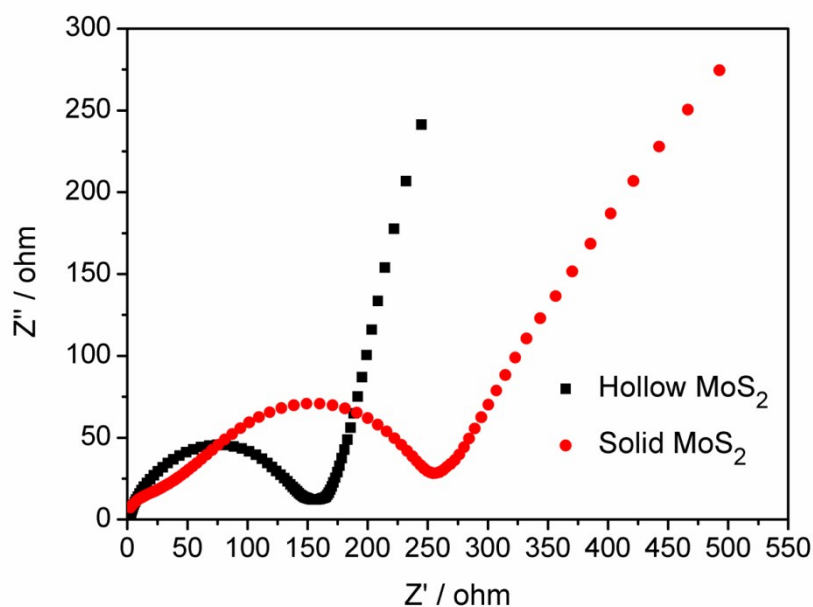


Fig. S2 Nyquist plots of hollow MoS₂ nanospheres and solid MoS₂ at open circuit potential.

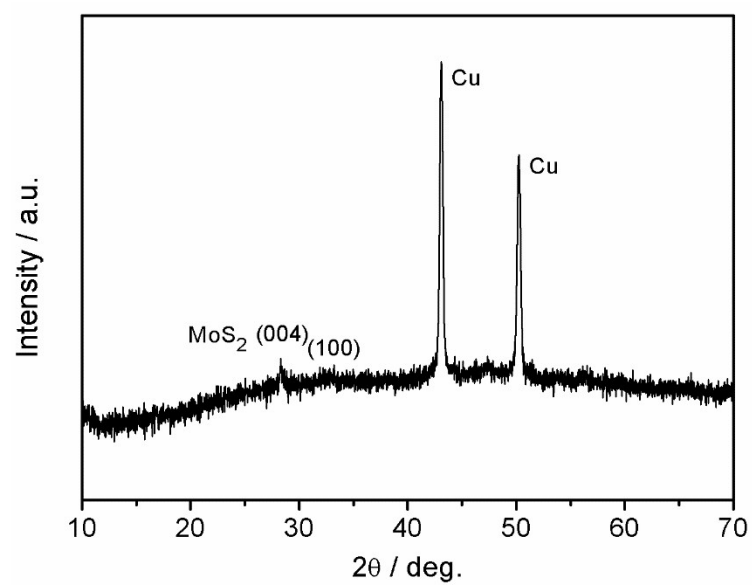


Fig. S3 XRD pattern of HNS electrode after cycles.

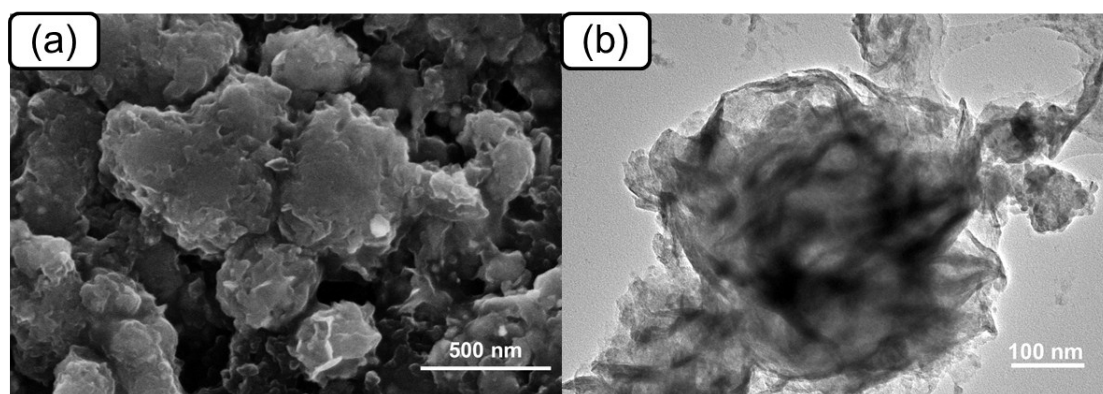


Fig. S4 FESEM image (a) and TEM image (b) of HNS after cycles.

Table.S1 Performance comparison of different MoS₂ materials for Li-ion batteries

Electrode materials	Current density	Initial discharge capacity	Cycle performance
MoS ₂ @3DVG ¹	100 mA g ⁻¹	866 mAh g ⁻¹	670 mAh g ⁻¹ after 30 cycles
Carbon@MoS ₂ nanotube ²	100 mA g ⁻¹	712 mAh g ⁻¹	740 mAh g ⁻¹ after 100 cycles
MoS ₂ microboxes ³	100 mA g ⁻¹	~ 1100 mAh g ⁻¹	900 mAh g ⁻¹ after 50 cycles
HNS (our work)	100 mA g ⁻¹	1276 mAh g ⁻¹	750 mAh g ⁻¹ after 50 cycles

Table.S2 Performance comparison of different MoS₂ materials for supercapacitors

Electrode materials	Electrolyte	Current density or scan rate	Specific capacitance
HNS (our work)	1M Na ₂ SO ₄	1 A g ⁻¹	142 F g ⁻¹
MoS ₂ nanosheet ⁴	1M Na ₂ SO ₄	1 A g ⁻¹	129.2 F g ⁻¹
MoS ₂ @MPC ⁵	1M H ₂ SO ₄	1 A g ⁻¹	189 F g ⁻¹
MoS ₂ nanowall films ⁶	0.5M H ₂ SO ₄	1 mV s ⁻¹	100 F g ⁻¹

References

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