

Supplementary Information

3D layered MoS₂ / interconnected graphene nanoribbons networks for
high performance lithium ion battery anode

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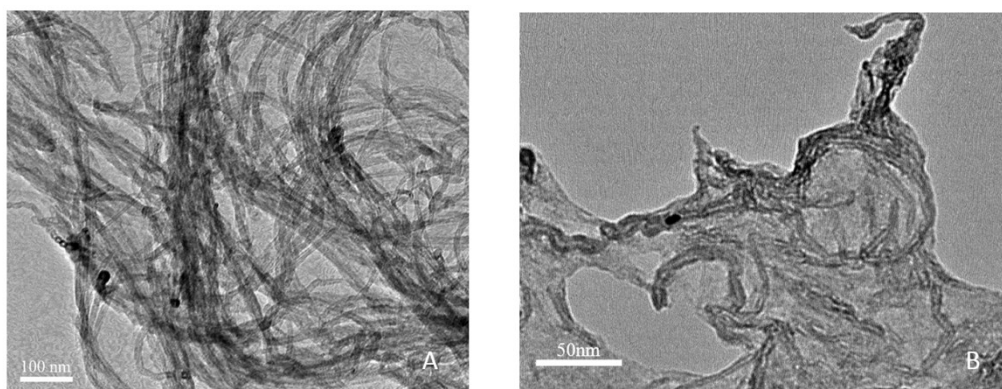


Figure S1 TEM images of (A) MWCNTsand (B) GONRs.

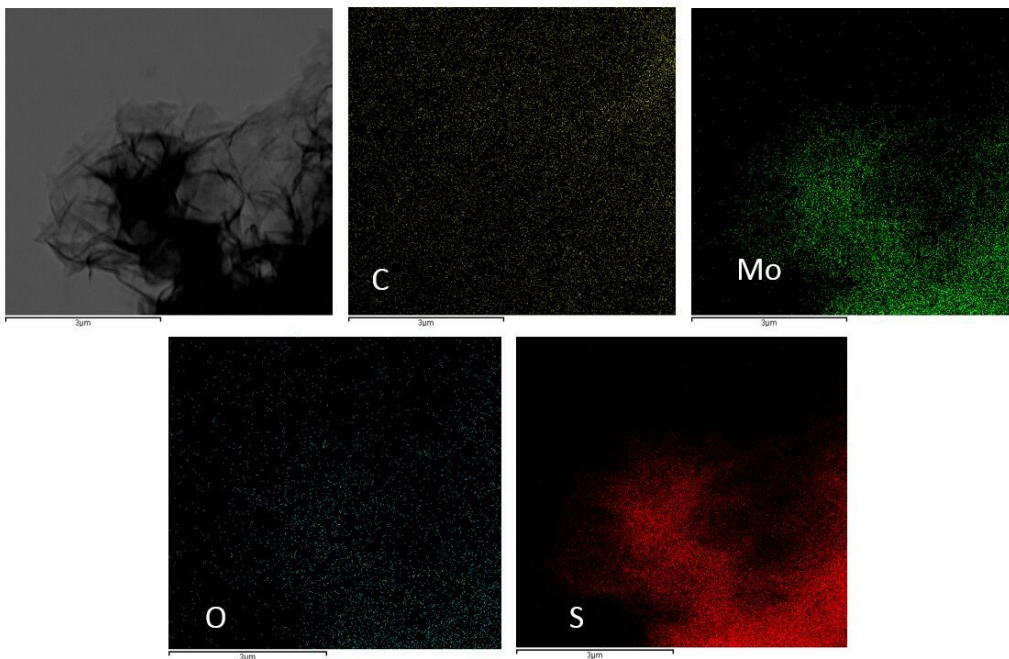


Figure S2 TEM EDS mapping images of MSG.

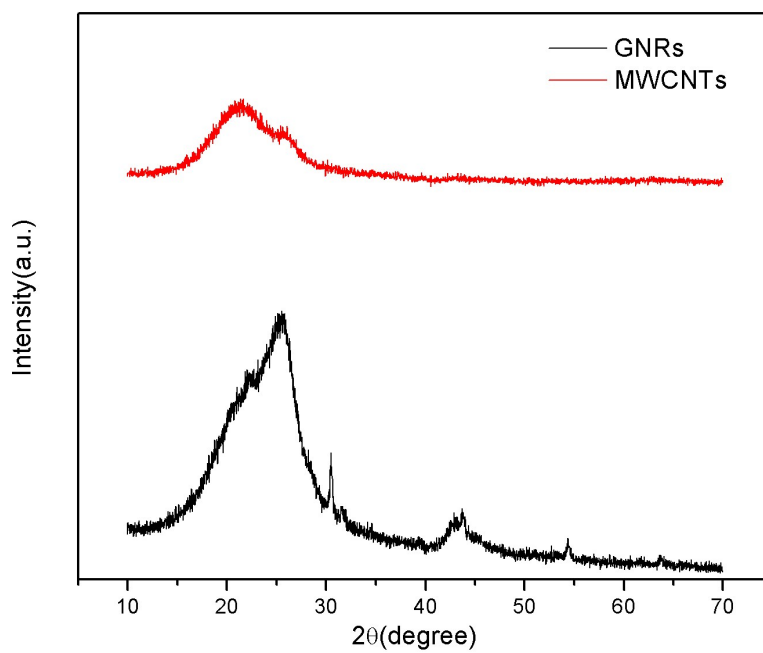


Figure S3 The XRD patterns of GNRs and MWCNTs.

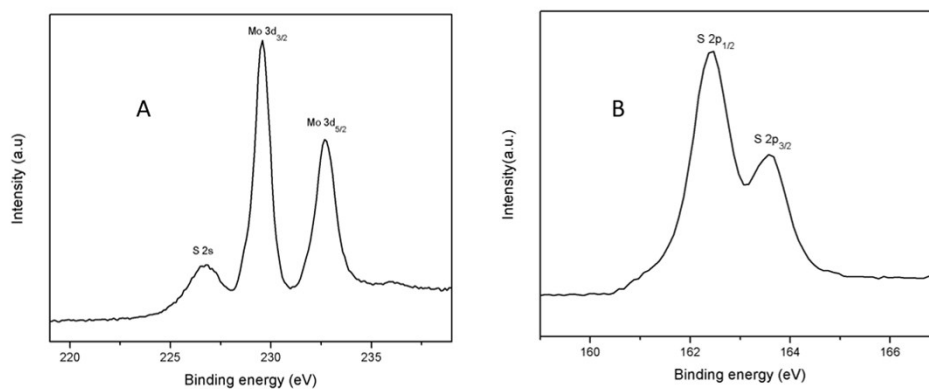


Figure S4 XPS spectra of MSG in (A) Mo 3d and (B) S 2p.

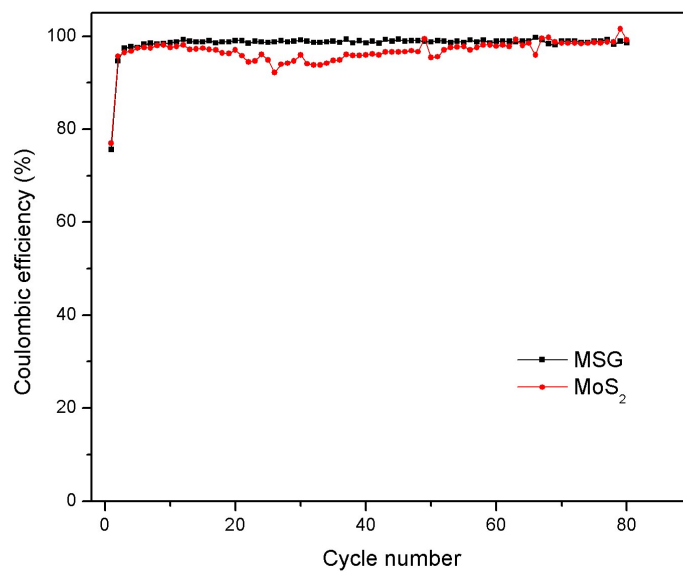


Figure S5 Coulombic efficiency of MSG and MoS₂

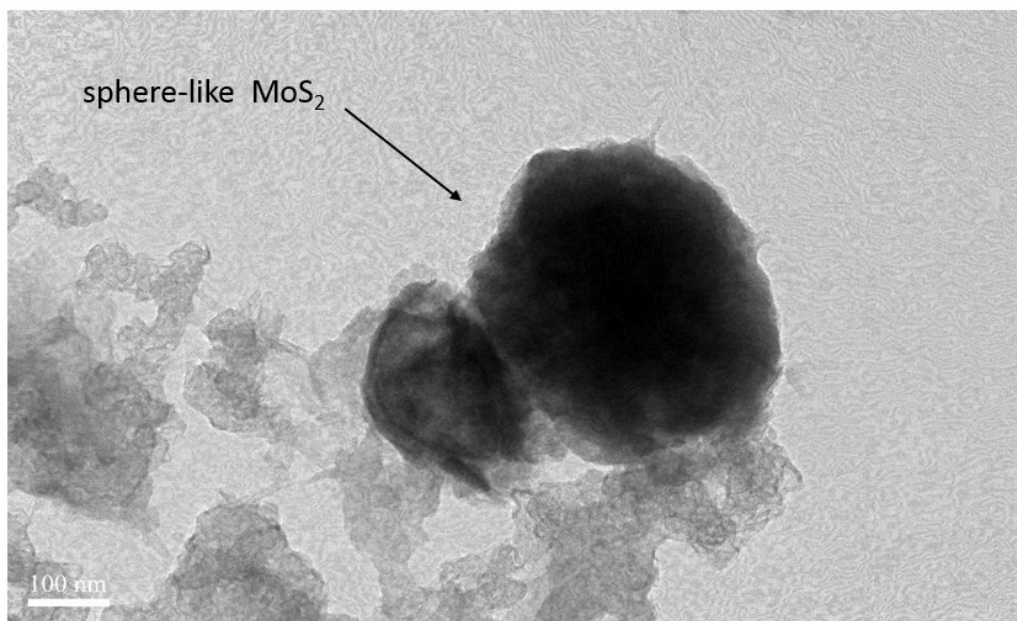


Figure S6 TEM images of MSG electrode after 20 cycles.

Table S1. Comparison of MoS₂ based anode materials

Active material	Charging rate (mA g ⁻¹)	Capacity retention (Capacity in mA h g ⁻¹ / Cycle No.)	Highest rate capacity in mA h g ⁻¹ / corresponding current density in A g ⁻¹
Present work	200	1009.4 / 80	606.8 / 3
C ₃ N ₄ /NRGO/MoS ₂ ¹	100	855 / 100	130 / 8
MoS ₂ ²	100	~900 / 50	554 / 53.1
MoS ₂ /PNAI Nanowires ³	100	952.6 / 50	320 / 1
MoS ₂ -r-GO-PEO ⁴	100	890 / 100	545 / 2
HC@MoS ₂ ⁵	250	970 / 100	560 / 4
CNT@MoS ₂ ⁶	100	698 / 60	369 / 1
MoS ₂ /a-C composites ⁷	100	912 / 100	961 / 0.1

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