

Supporting Information for:-

Electrode structure on performance of SnS anode in Li-ion batteries: Effect of electrode particle, conductive support shape and additive

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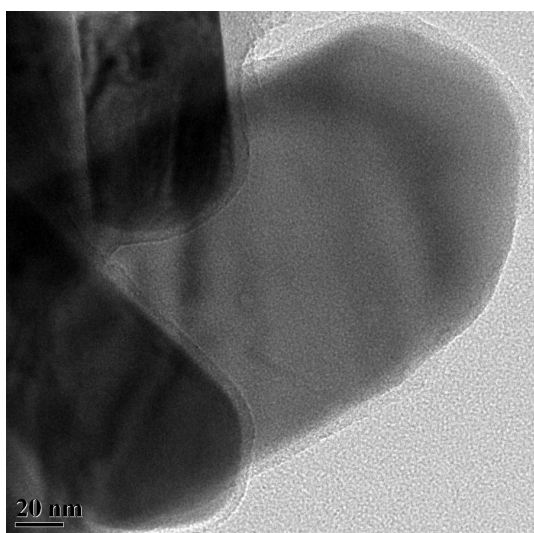


Fig. S1. TEM image of carbon coated SnS NRs prepared at carbonization temperature of 400 °C

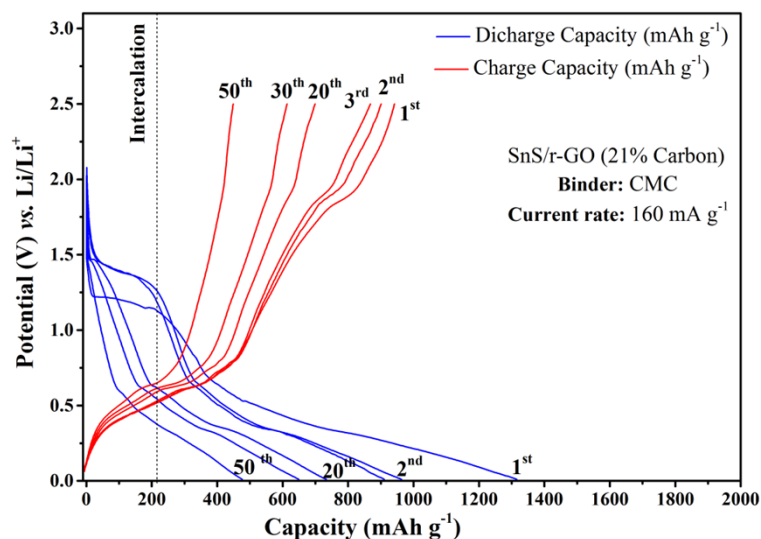


Fig. S2. Potential vs. capacity plot of SnS NRs/r-GO (21% carbon) electrode with CMC binder in the potential window of 0.01 V-2.5 V at current rate of 160 mA g⁻¹ against Li/Li⁺.

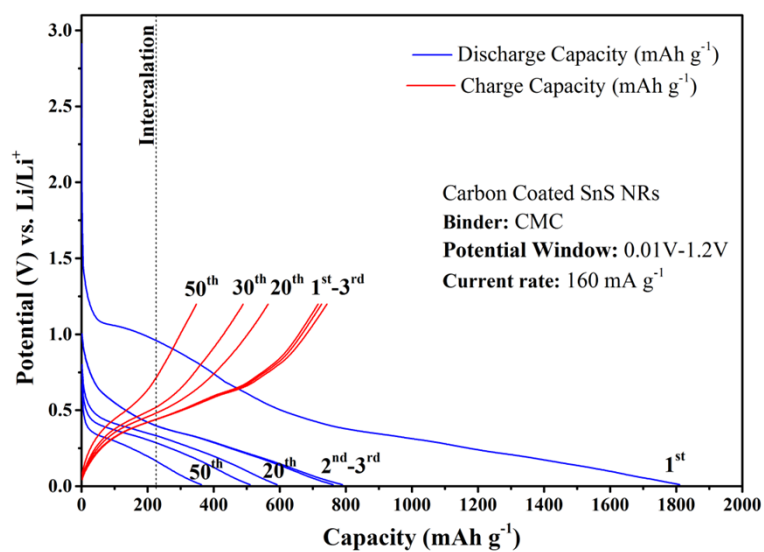
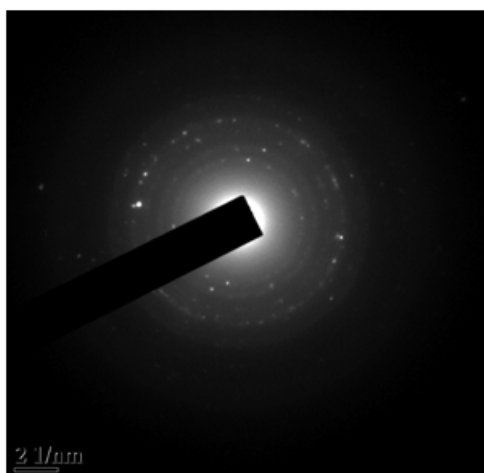
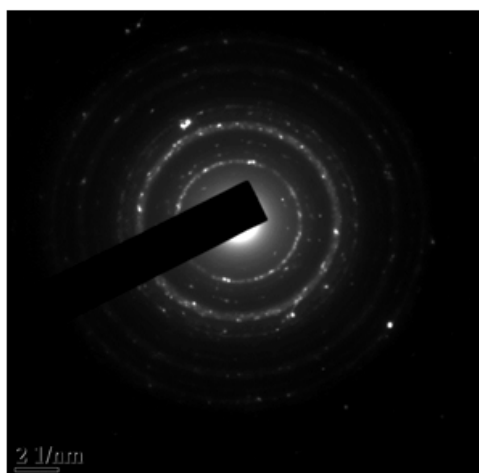


Fig. S3. Potential vs. capacity plot of carbon coated SnS NRs (18.5 % carbon) electrode with CMC binder in the potential window of 0.01 V-1.2 V at current rate of 160 mA g⁻¹ against Li/Li⁺.

(a) Carbon Coated SnS (CMC)



(b) SnS/r-GO (31% r-GO) PVDF



(c) SnS/r-GO (21% r-GO) CMC



(d) SnS/r-GO (31% r-GO) CMC

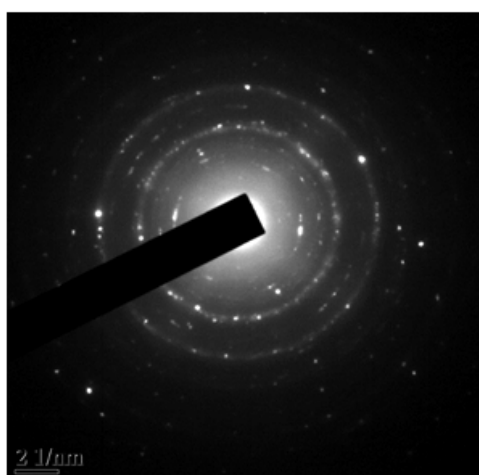


Fig. S4. SAED images of *ex-situ* samples of electrodes after 50th discharge cycle in a potential window of 0.01V-2.5V at current rate of 160 mA g⁻¹ against Li/Li⁺ (a) Carbon coated SnS NRs with CMC binder in potential window of 0.01V-1.2V, (b) SnS/r-GO (31%carbon) with PVDF binder, (c) SnS/r-GO (21% carbon) with CMC binder, and (d) SnS/r-GO (31% carbon) with CMC binder.