Supporting information

General Synthesis of Hollow MnO₂, Mn₃O₄, and MnO Nanospheres as Superior Anode Materials for Lithium Ion Batteries

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Fig. S1 TEM images of (a) carbon nanospheres and (b,c) CNSs@MnO₂ spheres. (d) XRD patterns of carbon nanospheres and CNSs@MnO₂ spheres.

15



Fig. S2 Nitrogen adsorption-desorption isotherms of (a) MnO₂, (b) Mn₃O₄ and (c) MnO hollow spheres.



5 Fig. S3 Cyclic voltammograms (CVs) of (a) MnO_2 , (b) Mn_3O_4 and (c) MnO hollow nanospheres at a scanning rate of 0.1 mV s⁻¹.



Fig. S4 First Discharge-charge curves of (a) MnO₂, (b) Mn₃O₄ and (c) MnO hollow nanospheres at various current densities.



Fig. S5 TEM images of the electrodes made of (a) MnO_2 , (b) Mn_3O_4 and (c) MnO after 20 cycles at 100 mA g⁻¹.