

## A Simple Synthesis of Hollow $\text{Mn}_2\text{O}_3$ Core-shell Microspheres and Its Application in Lithium Ion Batteries

Chunchen Zhang<sup>a</sup>, Chunli Guo<sup>a,\*</sup>, Yinghui Wei<sup>a,b,\*</sup>, Lifeng Hou<sup>a</sup>.

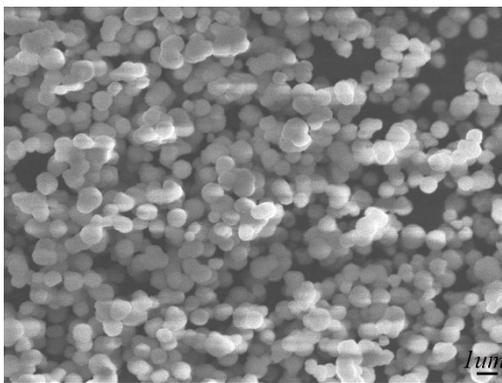


Fig. S1 A low-magnification SEM image of  $\text{MnCO}_3$  precursor.

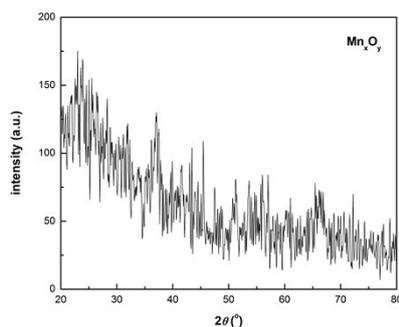


Fig. S2 XRD patterns of amorphous  $\text{Mn}_x\text{O}_y$

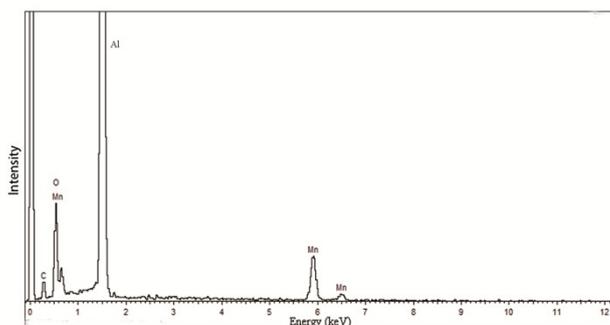


Fig. S3 EDS spectrum of amorphous  $\text{Mn}_x\text{O}_y$

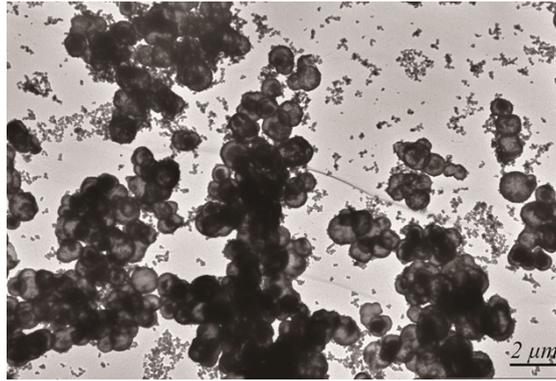


Fig. S4 TEM image of the manganese oxide before calcination

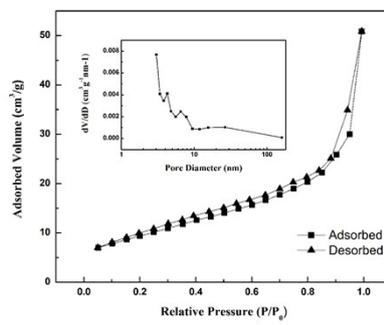


Fig. S5 Nitrogen adsorption-desorption isotherms and the corresponding pore size distribution of Mn<sub>2</sub>O<sub>3</sub> samples

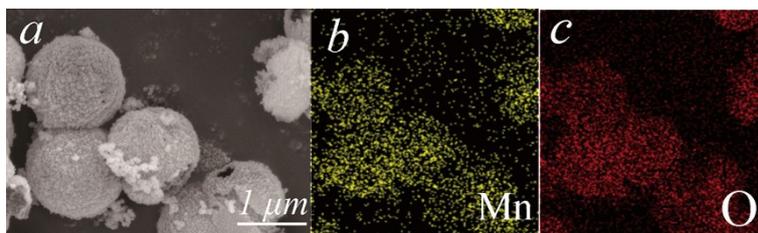


Fig. S6 (a) SEM image. (b) Mn, and (c) O elemental mapping images of pure Mn<sub>2</sub>O<sub>3</sub> microsphere