Supporting Information

Formation of porous nitrogen-doped carbon-coating MnO nanoshperes for advanced reversible lithium storage

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Figure S1. TEM images of (a) Mn(OAc)₂-C-8, (b) porous Mn₂O₃ nanospheres and (c) MnO@NC nanospheres.

Figure S2. Energy-dispersive X-ray spectroscopy (EDS) plots of pure Mn₂O₃ and MnO@NC nanospheres. Peaks of C and N appear from the decomposition of PDA.
Figure S3. (a), (b), (c) Low-magnification SEM images of the MnO@NC composites and (d) SEM image of porous Mn$_2$O$_3$ nanospheres.

Figure S4. TGA plot of the MnO@NC composites at O$_2$ atmosphere from room temperature to 800 °C with a heating rate of 10 °C min$^{-1}$.
Figure S5. Nitrogen adsorption-desorption isotherms and the pore size distribution curve of the MnO@NC nanospheres composites.

Figure S6. SEM (a and b) and TEM (c and d) images of MnO@NC nanospheres electrode after 200 cycles.