

## Supporting Information

### Coaxial MnO/N-doped carbon nanorods for advanced lithium-ion battery anode

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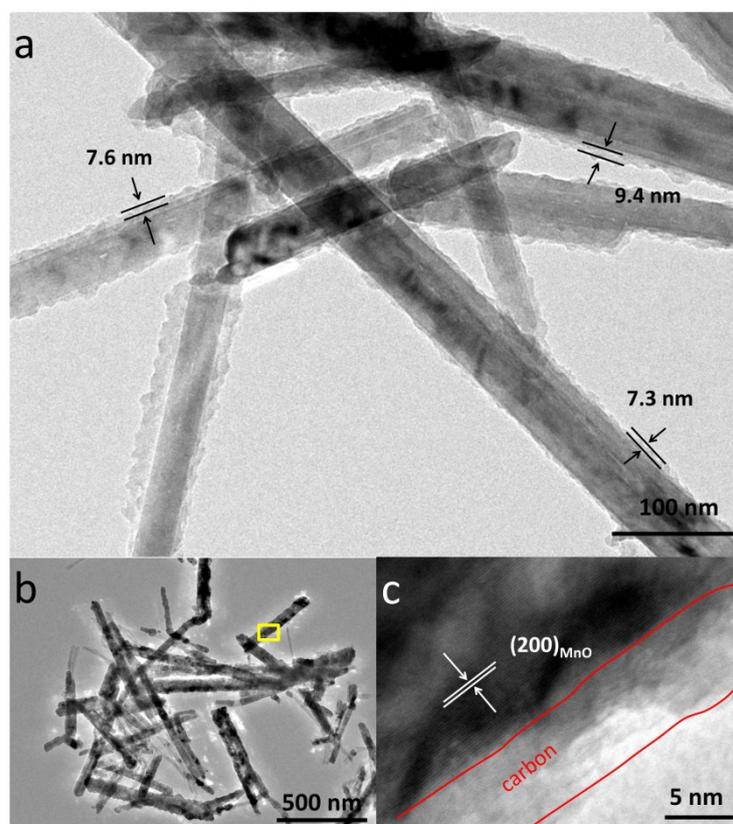


Fig. S1 TEM images of (a) MnOOH/PPy nanorods and (b) MnO/N-C nanorods. (c) HRTEM image of MnO/N-C nanorods highlighted by the yellow square in (b).

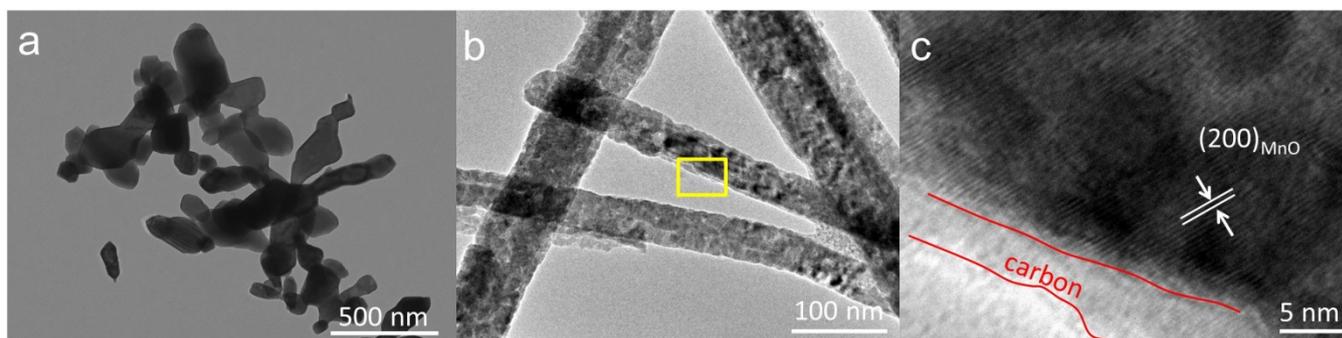


Fig. S2 TEM images of (a) MnO and (b) MnO/C nanorods. (c) HRTEM image of MnO/C nanorods highlighted by the yellow square in (b).

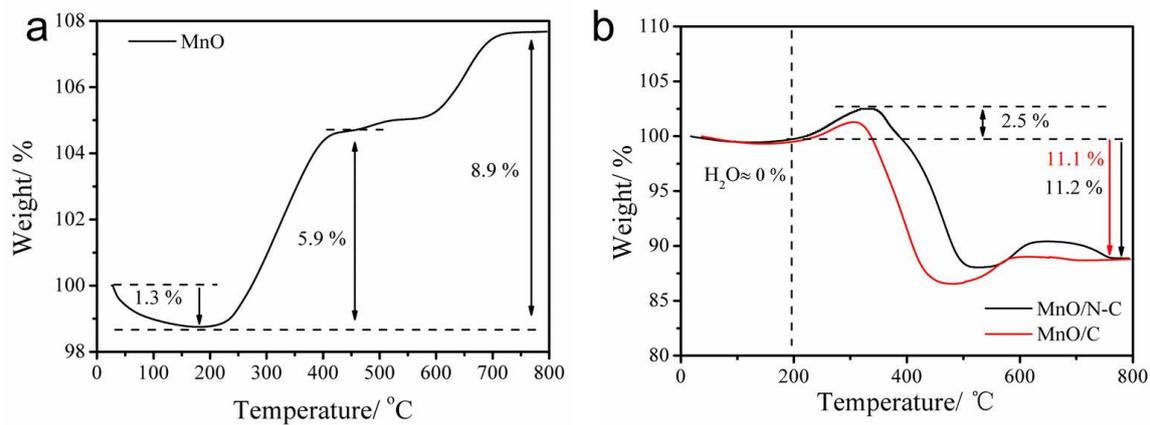


Fig. S3 TG curves of (a) MnO and (b) MnO/N-C, MnO/C at a heating rate of 10 °C min<sup>-1</sup> in air.

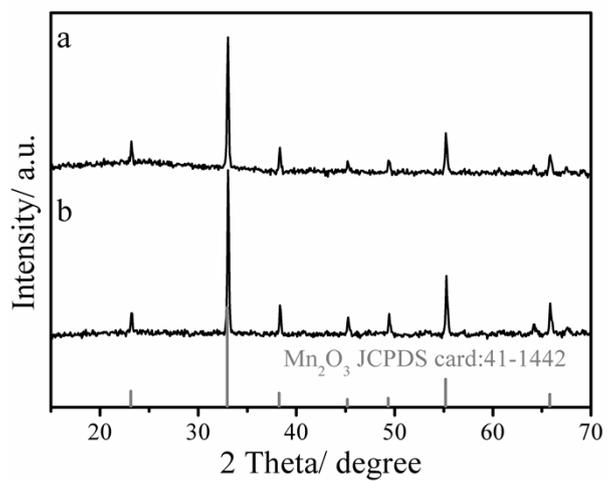


Fig. S4 XRD patterns of the products obtained by the calcination of (a) MnO/N-C and (b) MnO/C at 800 °C in air for 2 h.

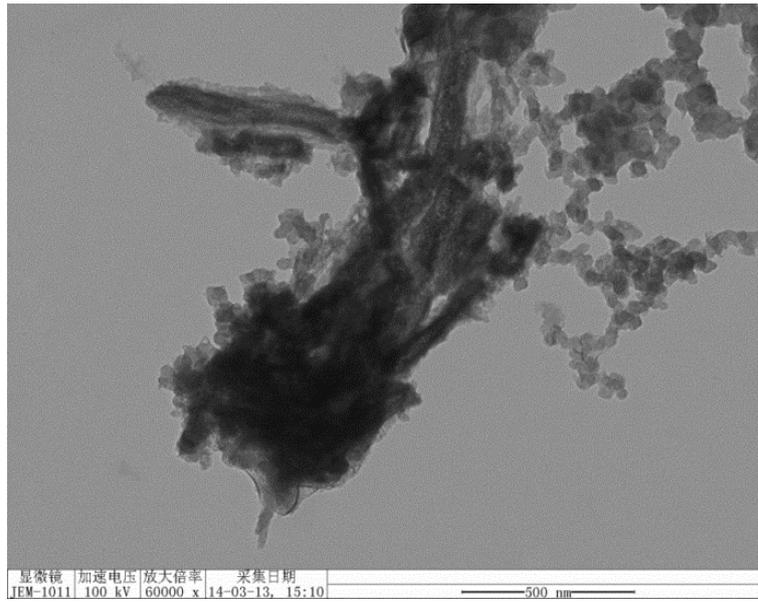


Fig. S5 TEM image of the electrode after rate capability test.