Supplementary Information

Coaxial-nanostructured $MnFe_2O_4$ nanoparticles on polydopamine-coated MWCNT for anode materials in rechargeable batteries

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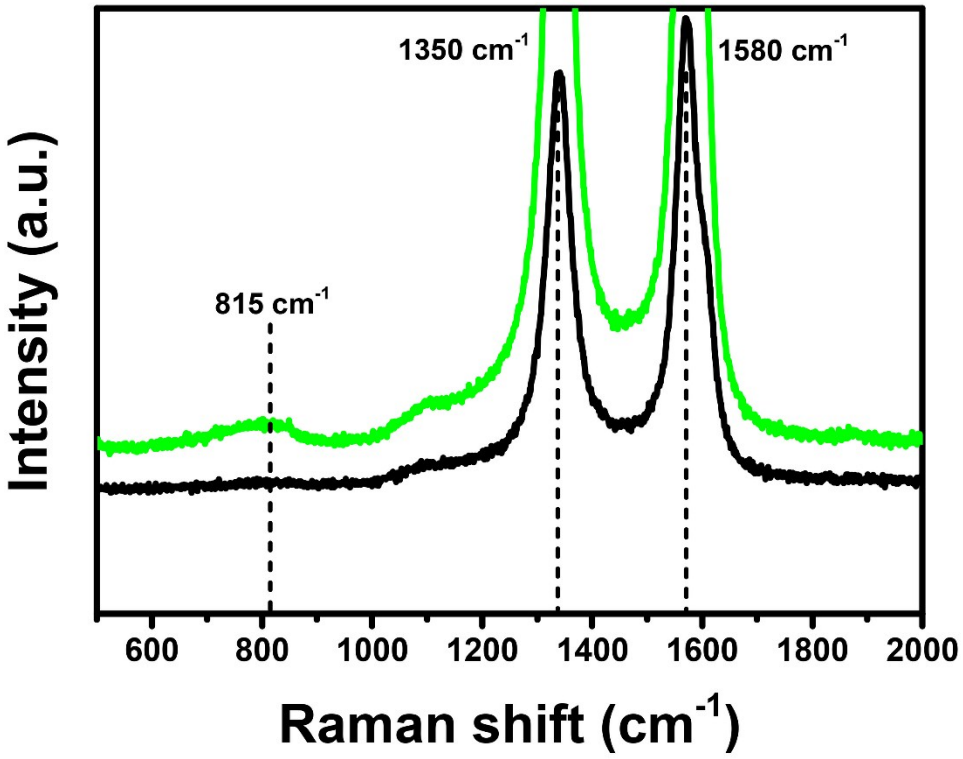

Fig. S1 Raman spectra of pristine MWCNT (black line) and PDA-coated MWCNT (green line).

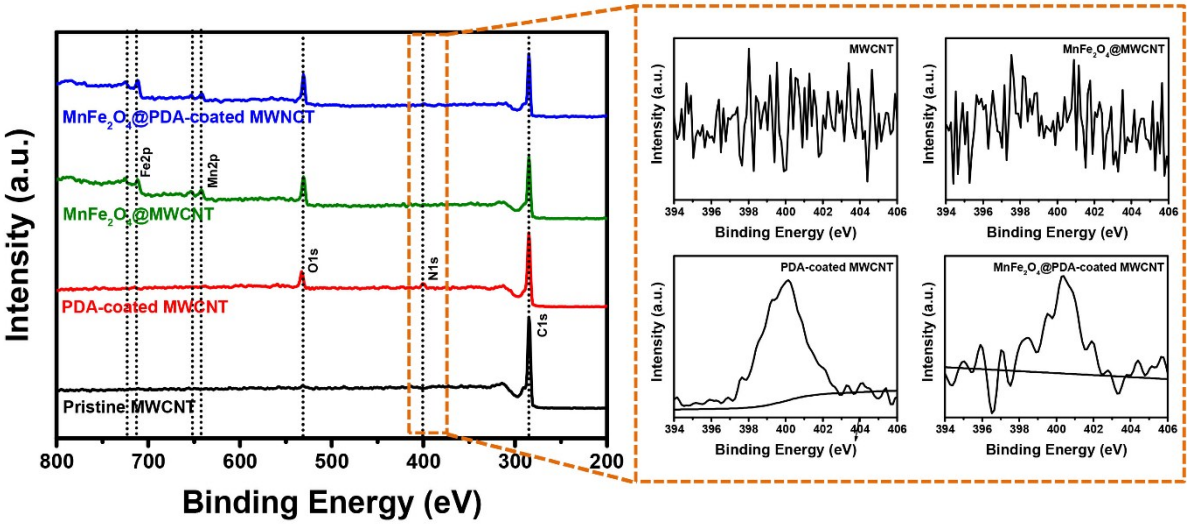

Fig. S2 XPS full scan and N1s narrow scan spectra for the as-prepared samples.

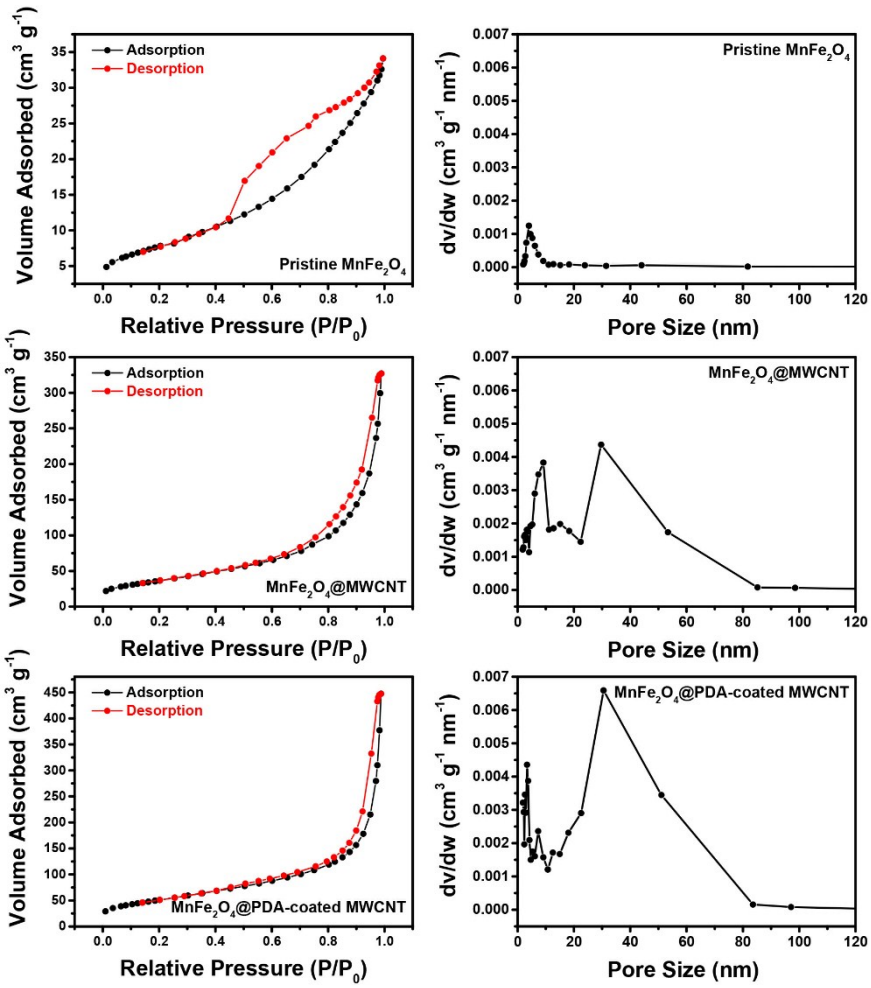

Fig. S3 N_2 adsorption-desorption isotherm and pore size distribution of the as-prepared samples.

Table S1 Results of BET analyses of the as-prepared samples

Sample	Surface area (m^2 g^{-1})
Pristine $MnFe_2O_4$	28.14
$MnFe_2O_4$@MWCNT	131.9
$MnFe_2O_4$@PDA-coated MWCNT.	185.5

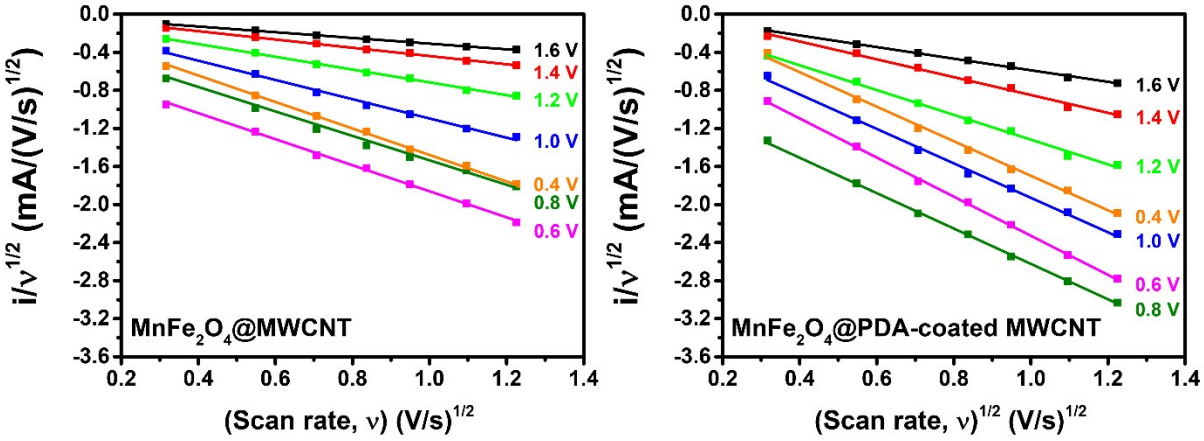

Fig. S4 $i/v^{1/2}$ vs. $v^{1/2}$ plots for the $MnFe_2O_4$@MWCNT and $MnFe_2O_4$@PDA-coated MWCNT using the cathodic current in the potential range of 1.6 ~ 0.4 V (vs. Li^+/Li) at various scan rates (0.1 ~ 1.5 mV s^{-1}).