Supporting information

Mesoporous CoFe₂O₄ nanospheres cross-linked by carbon nanotubes as high-performance anodes for Lithium-ion batteries

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**Fig. S1** Characterization of CNTs: (a) SEM image, (b) the diameter distribution evaluated based on 120 CNTs, (c) TEM image, and (d) TG curve.
**Fig. S2** The size distribution of CFO nanospheres calculated based on 70 nanospheres from SEM image in Fig. 1a.

**Fig. S3** (a) N\textsubscript{2} adsorption-desorption isotherms, and (b) BJH-PSD curves of CFO, CFO/CNT1, CFO/CNT2, and CFO/CNT3 samples. (For clarity, the isotherms of CFO/CNT1, CFO/CNT2, and CFO/CNT3 were vertically shifted for 50, 100 and 150 cm\textsuperscript{3}/g, respectively.)
Fig. S4 CV curves of physical mixed CFO+CNT at a scan rate of 0.1 mV s\textsuperscript{-1}.

Fig. S5 Electrochemical properties of CNTs: (a) the initial discharge-charge curves, and (b) cycling property at a current density of 50 mA g\textsuperscript{-1}. 
Fig. S5 XRD patterns of fresh CFO/CNT2, CFO/CNT2 after 100 charge-discharge cycles, and CFO after 50 charge-discharge cycles.