

Supporting information

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

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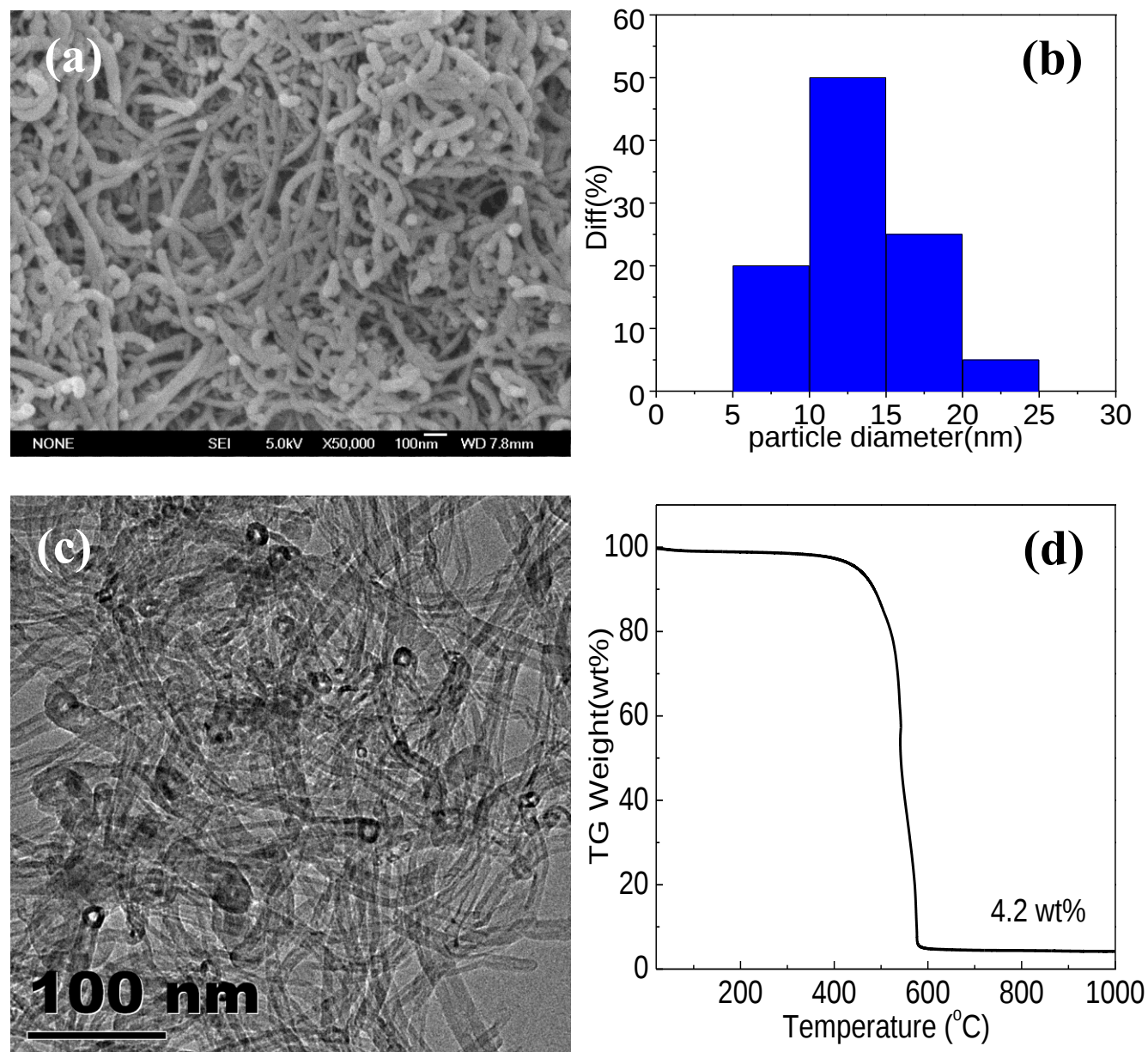


Fig. S1 Characterization of CNTs: (a) SEM image, (b) the diameter distribution evaluated based on 120 CNTs, (c) TEM image, and (e) TG curve.

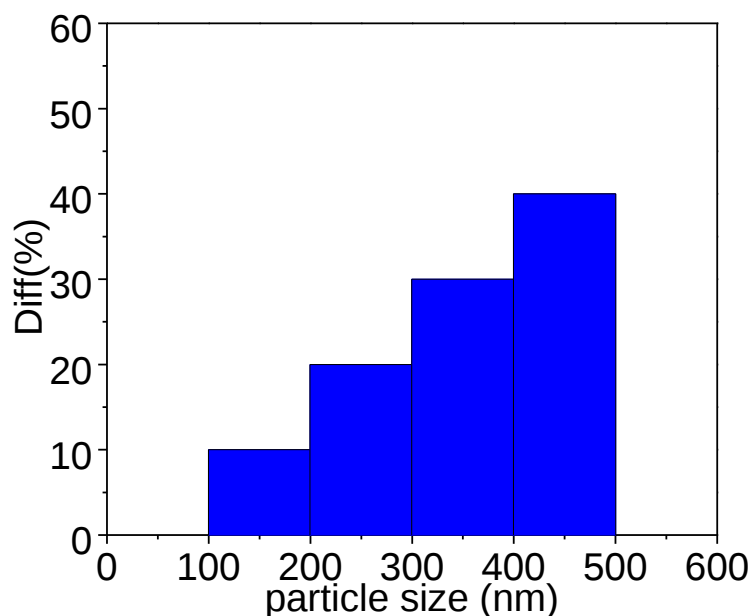


Fig. S2 The size distribution of CFO nanospheres calculated based on 70 nanospheres from SEM image in Fig. 1a.

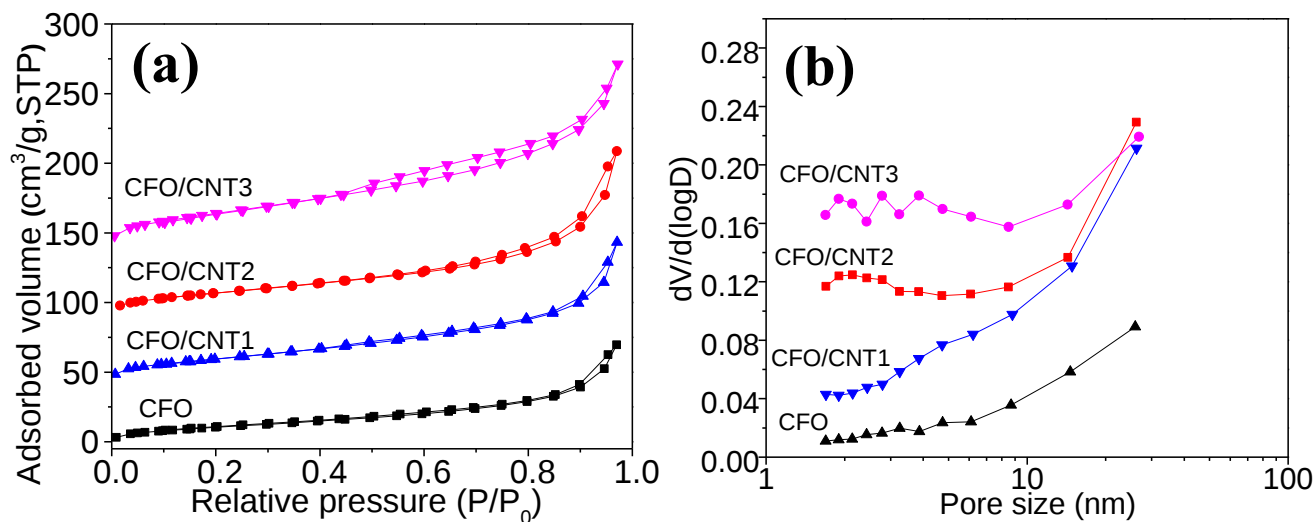


Fig. S3 (a) N₂ adsorption-desorption isotherms, and (b) BJH-PSD curves of CFO, CFO/CNT1, CFO/CNT2, and CFO/CNT3 samples. (For clarity, the isotherms of CFO/CNT1, CFO/CNT2, and CFO/CNT3 were vertically shifted for 50, 100 and 150 cm³/g, respectively.)

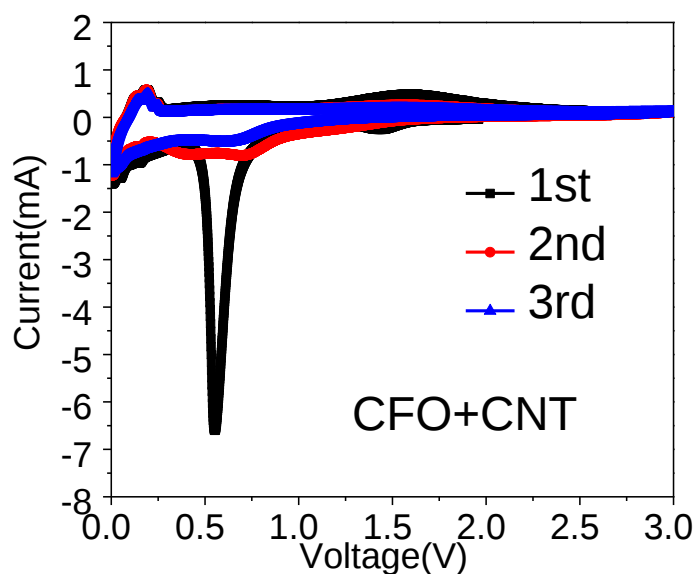


Fig. S4 CV curves of physical mixed CFO+CNT at a scan rate of 0.1 mV s^{-1} .

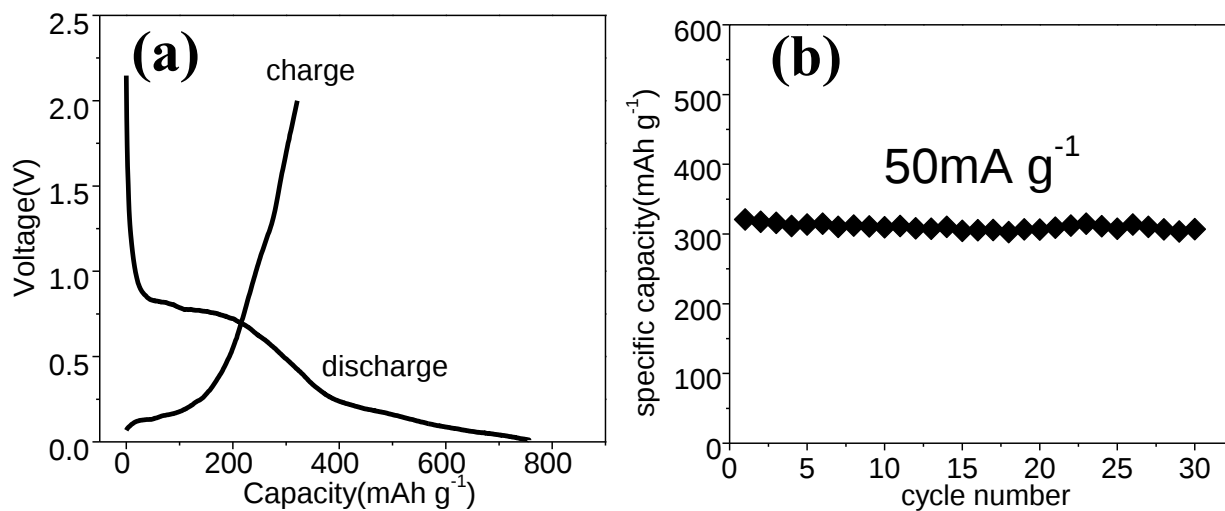


Fig. S5 Electrochemical properties of CNTs: (a) the initial discharge-charge curves, and (b) cycling property at a current density of 50 mA g^{-1} .

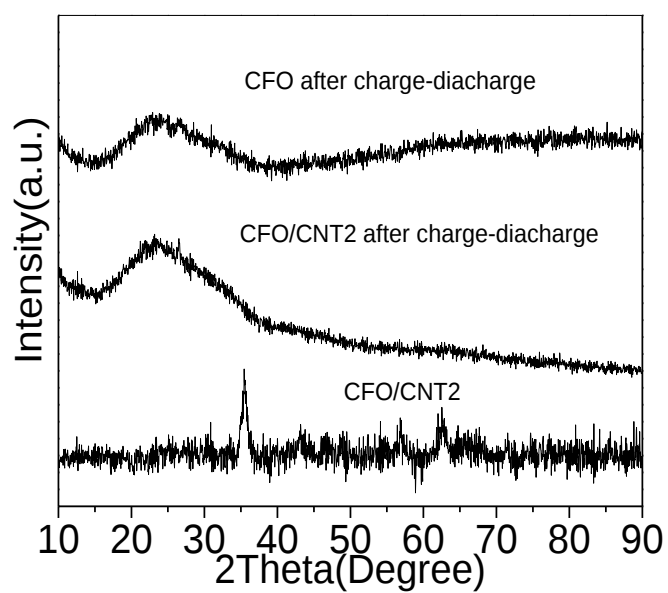


Fig. S5 XRD patterns of fresh CFO/CNT2, CFO/CNT2 after 100 charge-discharge cycles, and CFO after 50 charge-discharge cycles.