Supporting Information

Ethylene glycol-mediated rapid synthesis of carbon-coated $ZnFe_2O_4$ nanoflakes with long-term and high-rate performance for lithium-ion batteries

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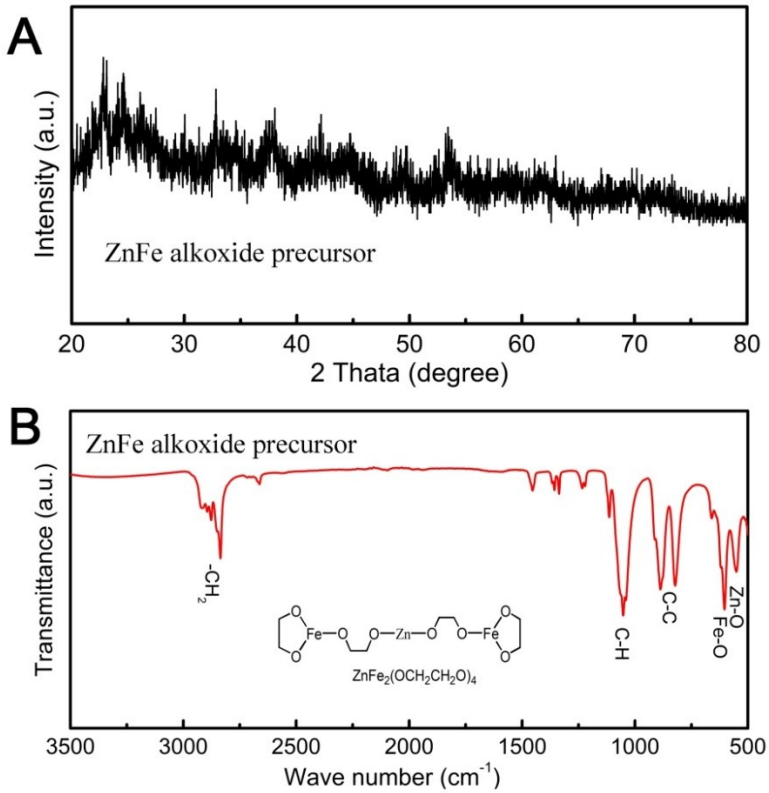

Figure S1. XRD pattern (A) and FT-IR spectra (B) of as-prepared ZnFe alkoxide precursor.

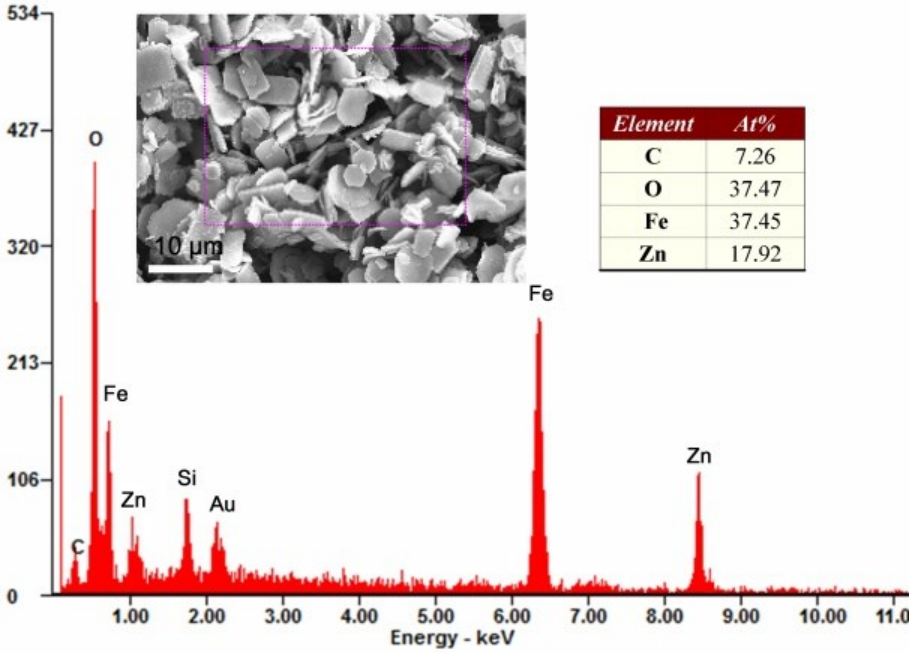

Figure S2. EDX spectra of as-prepared $ZnFe_2O_4$@C NFs, Inserted FESEM image shows the scan area.

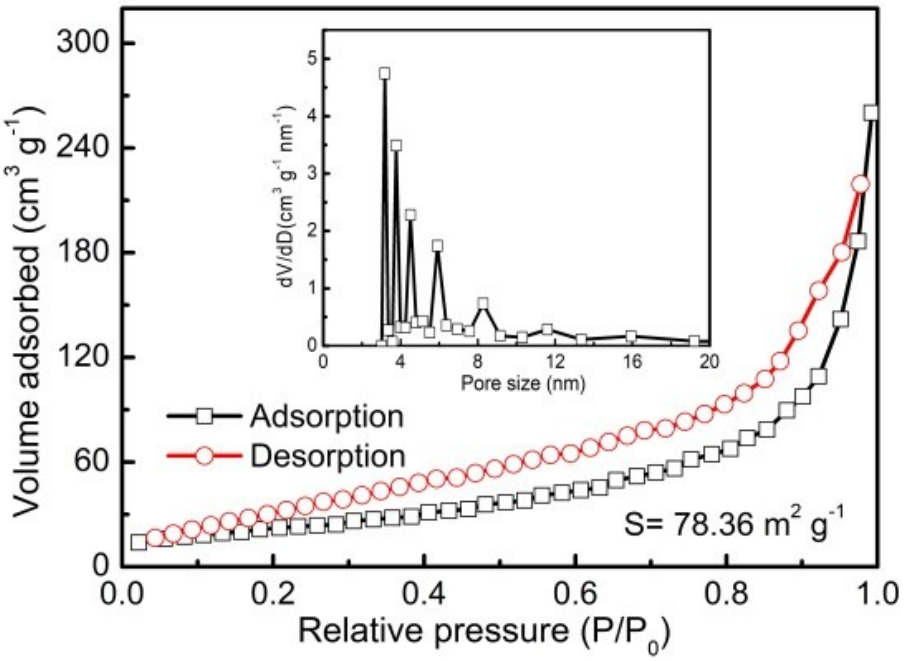

Figure S3. N_2 adsorption-desorption isotherm of the as-prepared $ZnFe_2O_4$@C NFs. The inserted plots exhibit the pore size distribution curve according to BJH method.

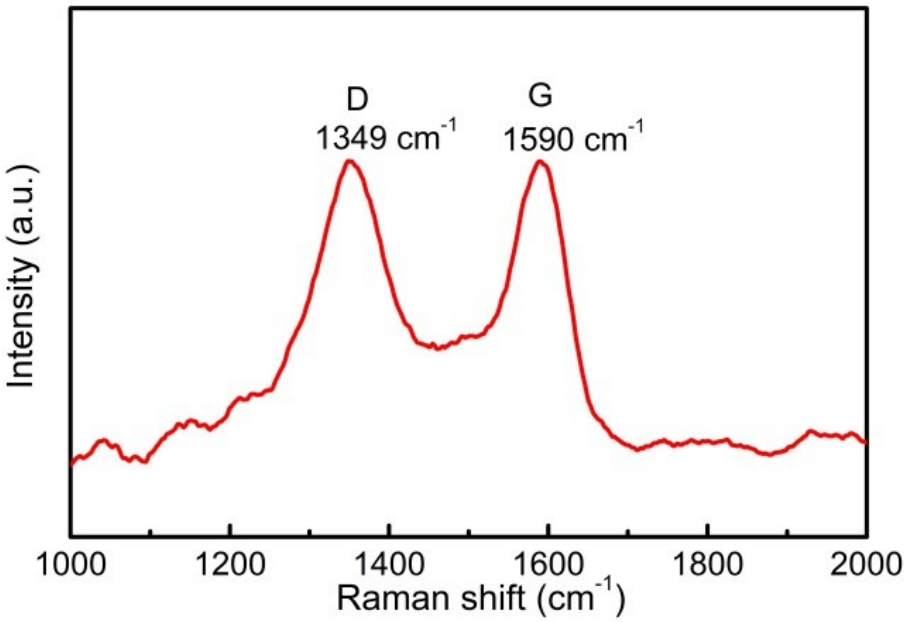

Figure S4. Raman spectra of as-prepared $ZnFe_2O_4$@C NFs.

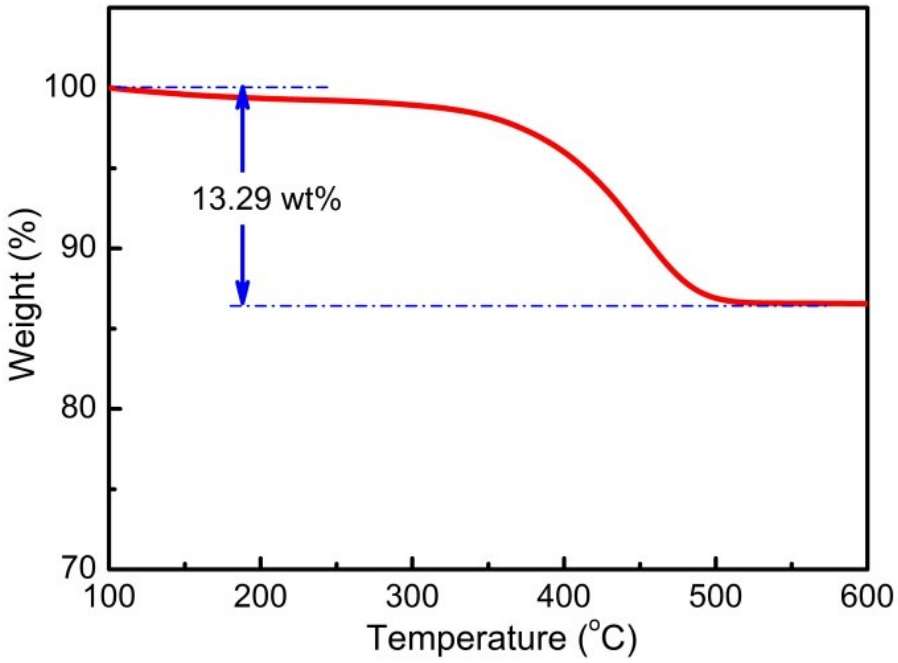

Figure S5. TGA profile of as-prepared $ZnFe_2O_4$@C NFs in air between 100 and 600 °C with a heating rate of 10 °C min^{-1}.

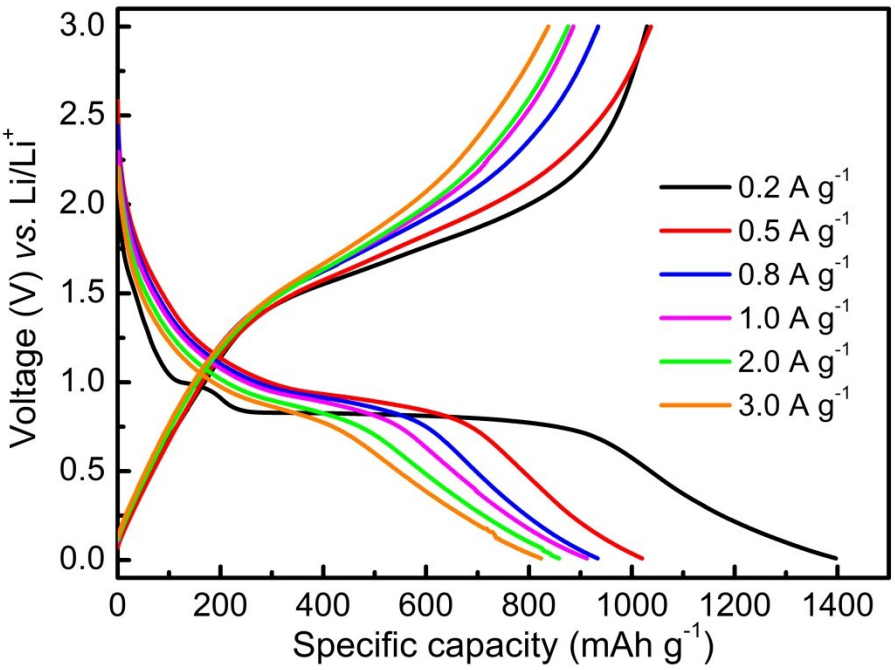

Figure S6. Discharge/charge voltage curves of as-prepared $ZnFe_2O_4$@C NFs at different current densities in the voltage window of 0.01 and 3.0 V.

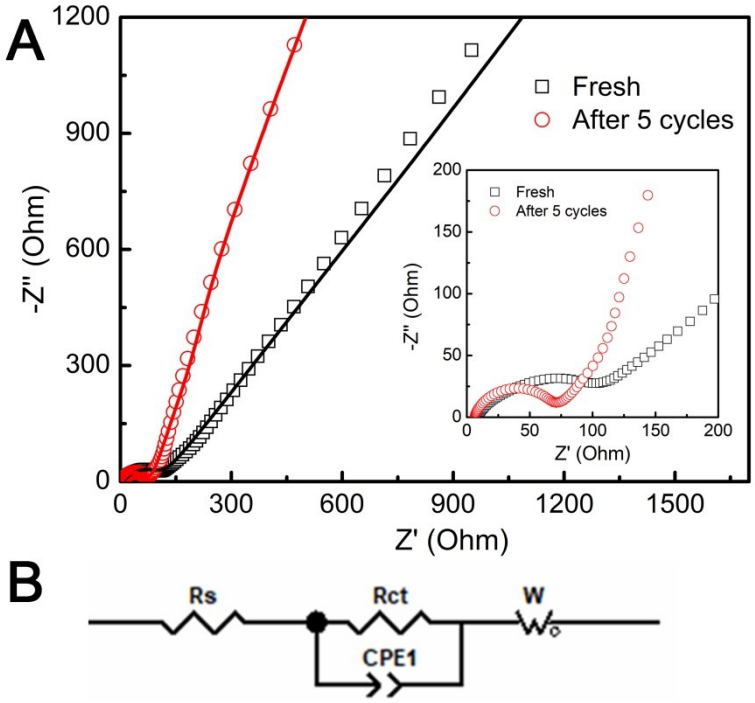

Figure S7. (A) Nyquist plots and (B) equivalent circuit of as-prepared $ZnFe_2O_4$@C NF electrodes measured with an amplitude of 5.0 mV over the frequency range of 100 kHz and 0.01 Hz by applying a sine wave.

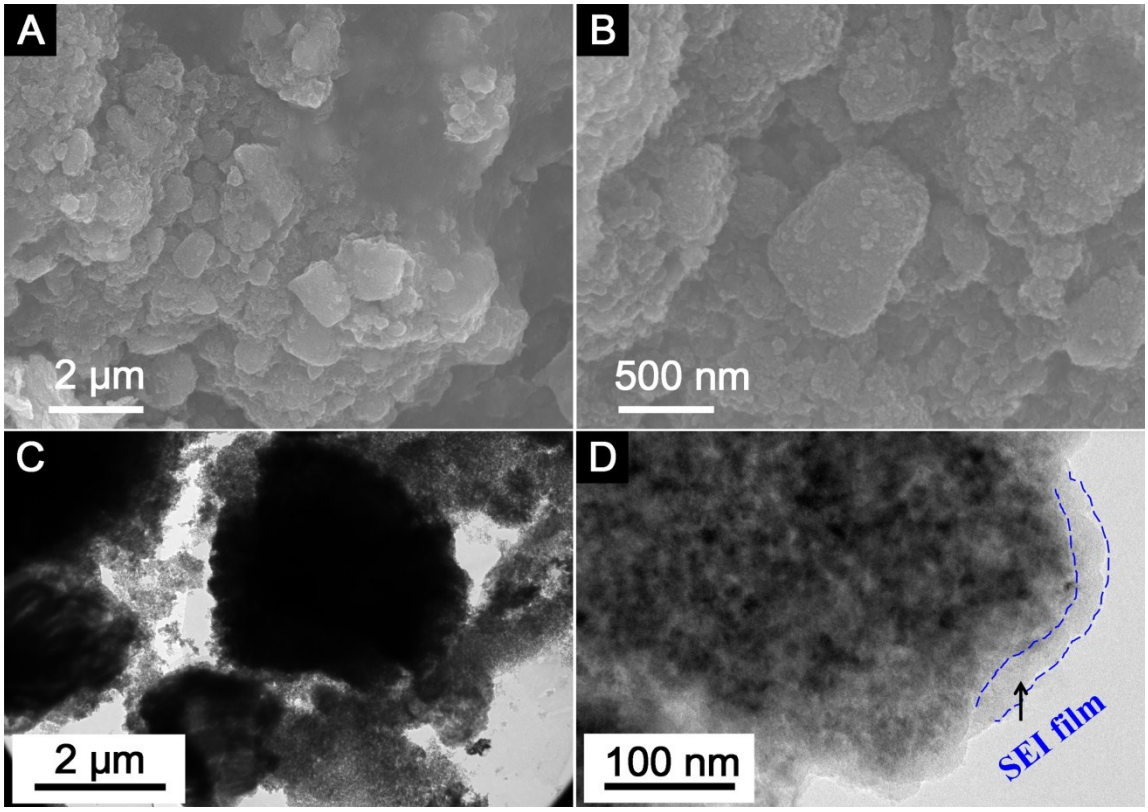

Figure S8. Post-mortem FESEM images of $ZnFe_2O_4$@C NFs after 1000 cycles at 0.5 A g^{-1}.