

A Novel Fe/Fe₃O₄/N-carbon composite with hierarchical porous structure and in situ formed N-doped graphene-like layers for high-performance lithium ion batteries

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Figure S1. Raman spectra of RHC, Fe/Fe₃O₄/carbon and Fe/Fe₃O₄/N-carbon.

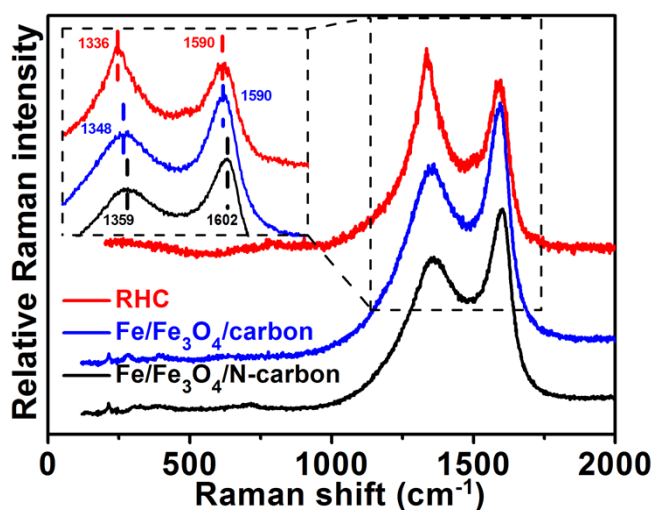


Figure S2. TGA curves of RHC, Fe/Fe₃O₄-carbon, Fe/Fe₃O₄/N-carbon and Fe/Fe₃O₄/N without carbon.

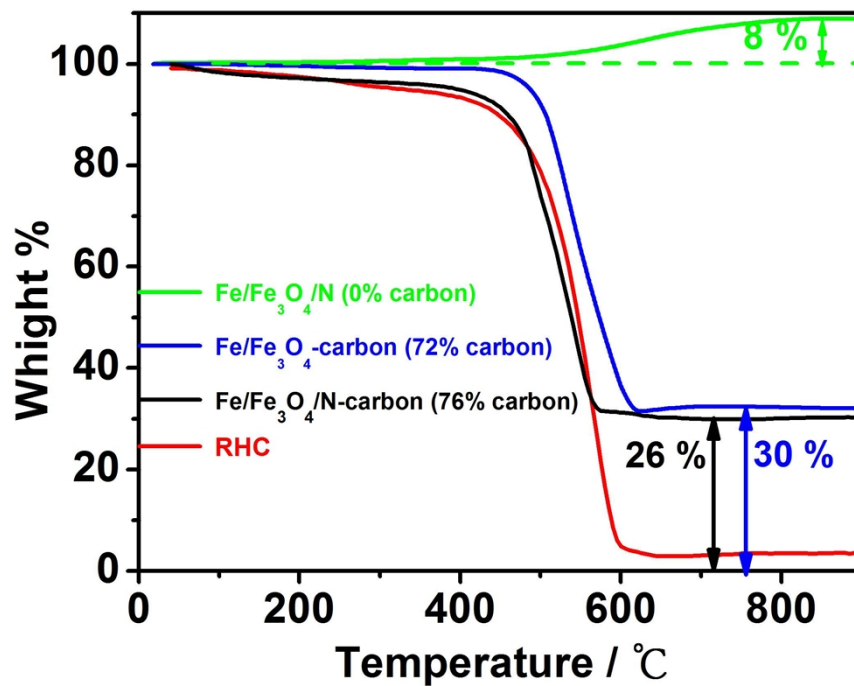


Figure S3. Galvanostatic charge–discharge curves of (a) Fe/Fe₃O₄/N-carbon (b) RHC and (c) Fe/Fe₃O₄/carbon in the voltage range 0.01-3.0 V (vs. Li) at a current of 50 mA g⁻¹.

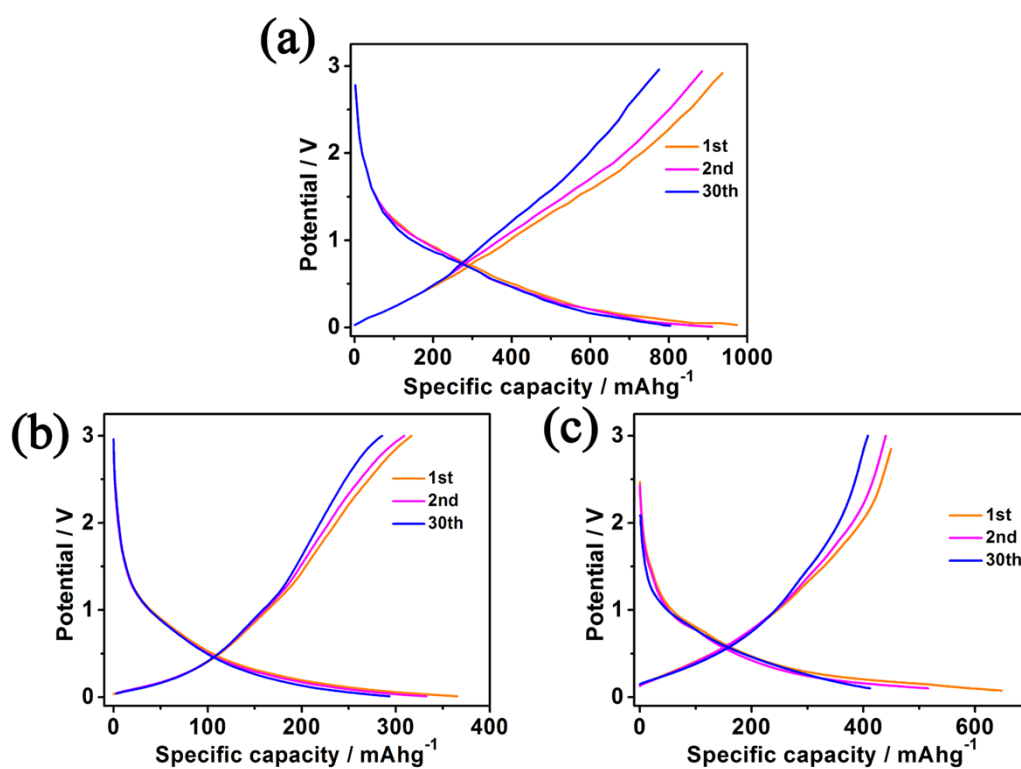


Figure S4. The equivalent circuit of Fe/Fe₃O₄/N-carbon, RHC and Fe/Fe₃O₄/carbon.

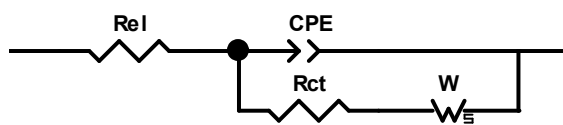


Figure S5. TEM images of Fe/Fe₃O₄/N-carbon composite after 100 discharge/charge cycles.

