Supporting information

Natural collagen fiber-enabled facile synthesis of carbon@Fe₃O₄ core-shell nanofiber bundles and their application as ultrahigh rate anode materials of Li-ion batteries

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Fig. S1 SEM images of CF@Fe³⁺ with different magnifications (b is the magnified area marked in a).
Fig. S2 Raman spectrum of C@Fe$_3$O$_4$NFB.
Fig. S3 XRD pattern of C@Fe$_3$O$_4$NFB.
Fig. S4 SEM image of Fe₃O₄ NPs on NFB (a) and the size distribution of Fe₃O₄ NPs on NFB (b).
Fig. S5 TEM-EDX analysis of C@Fe₃O₄NF (the area in Fig. 3f marked with red box).
Fig. S6 TGA curve of C@Fe₃O₄NFB in air flow with a heating rate of 10 °C min⁻¹.
Fig. S7 SEM image of commercial Fe₃O₄ NPs.
Fig. S8 Cycling stability at 0.2 A g⁻¹ of C@Fe₃O₄NFB prepared at 600°C using different initial amounts of Fe³⁺.
Fig. S9 Cycling stability at 0.2 A g⁻¹ of C@Fe₃O₄ NFB prepared from different calcination temperatures with 4.0 g of Fe₂(SO₄)₃.