

Electronic Supplemental Information

Sustainable synthetic route for γ -Fe₂O₃/C hybrid as anode material for lithium ion batteries

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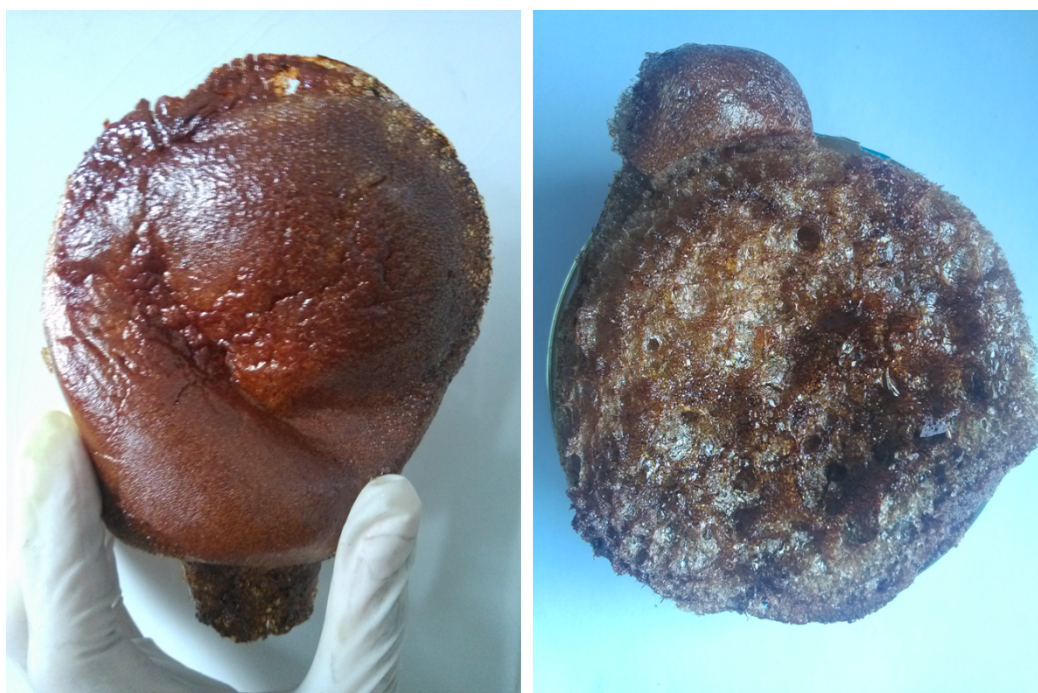


Figure S1. Digital images of the sponge-like dry gel.

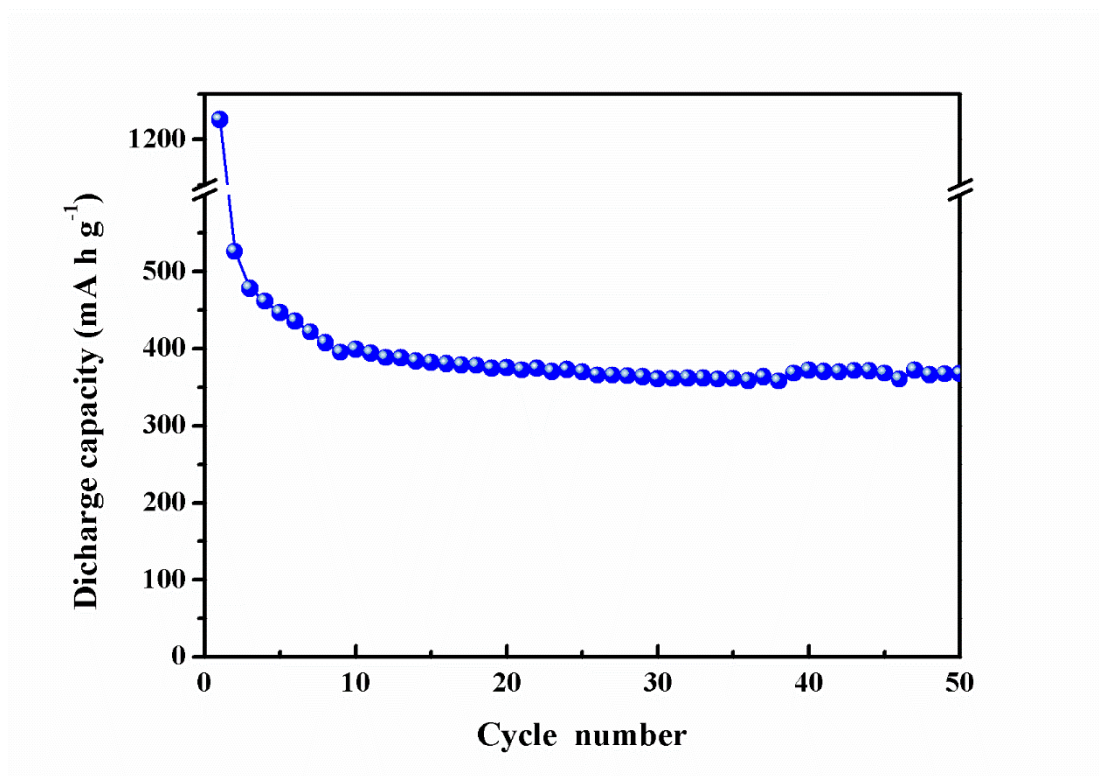


Figure S2. Cycle performance of the sample obtained from direct carbonization.

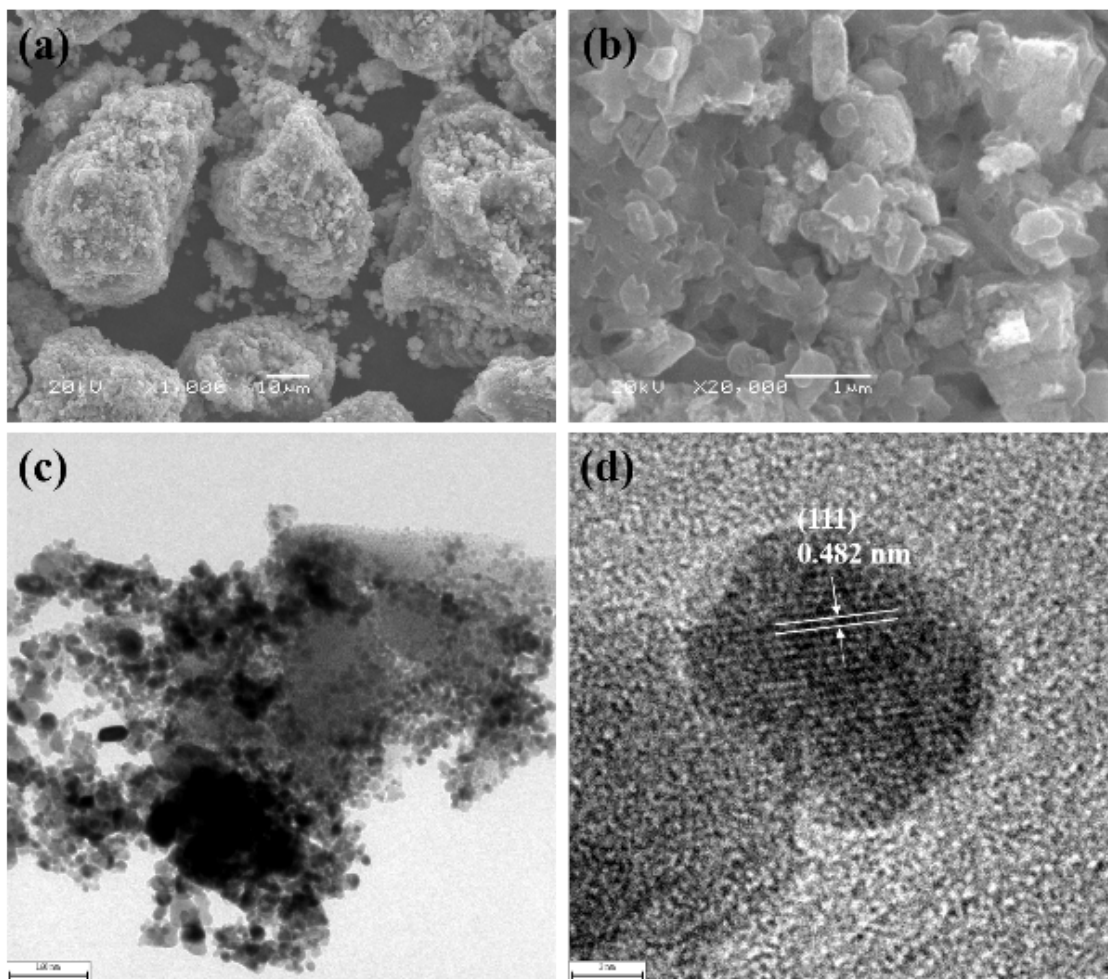


Figure S3 SEM (a,b) and TEM (c,d) images of FO/C-H at different magnification. The scale bars orderly represent 10 μm (a), 1 μm (b), 160 nm (c), 3 nm (d).

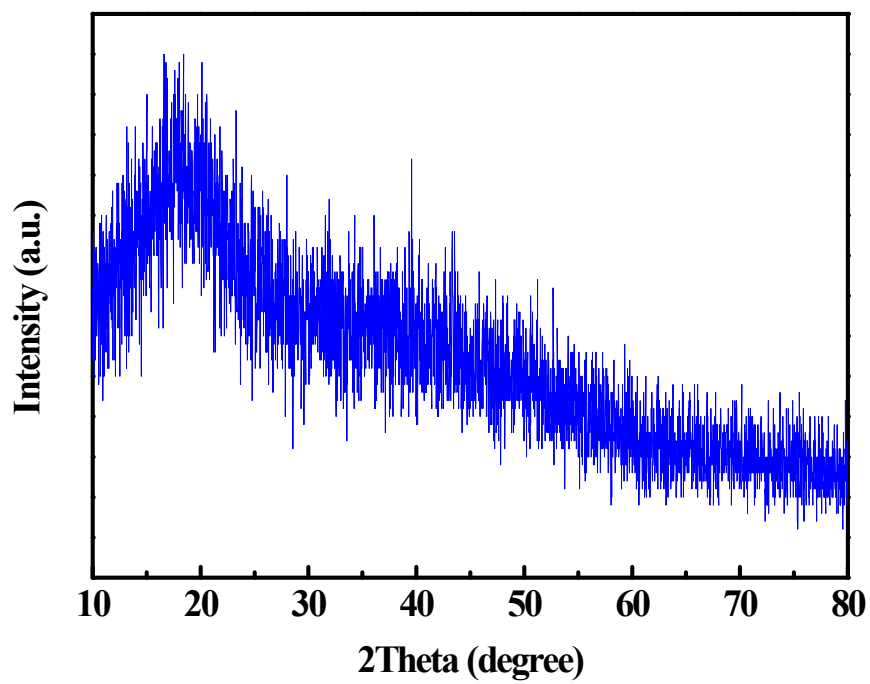


Figure S4. XRD pattern of the sponge-like dry gel.

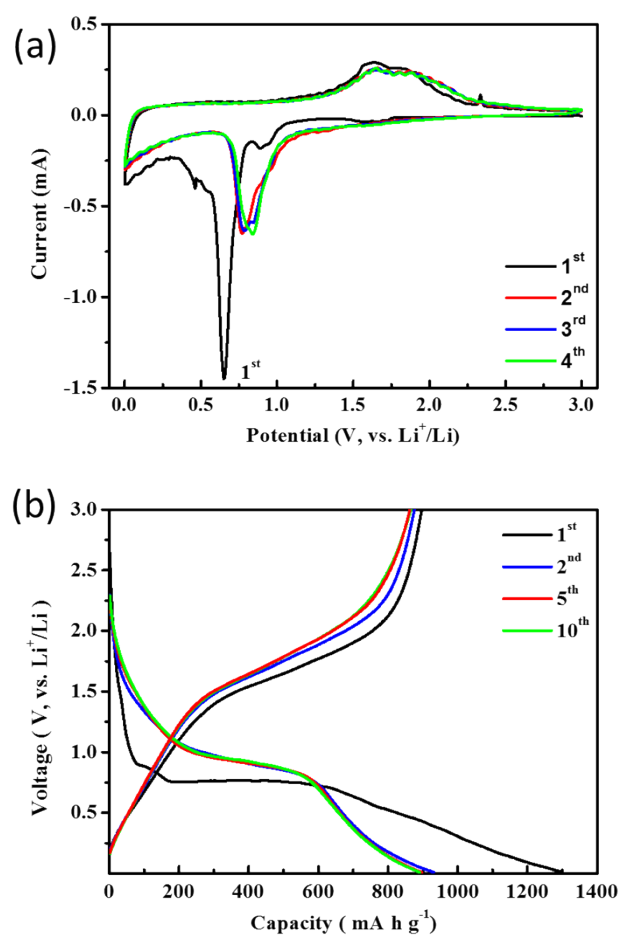


Figure S5 CV curves (a) and charge-discharge profiles (b) at 0.5 A g⁻¹ of FO/C-H.

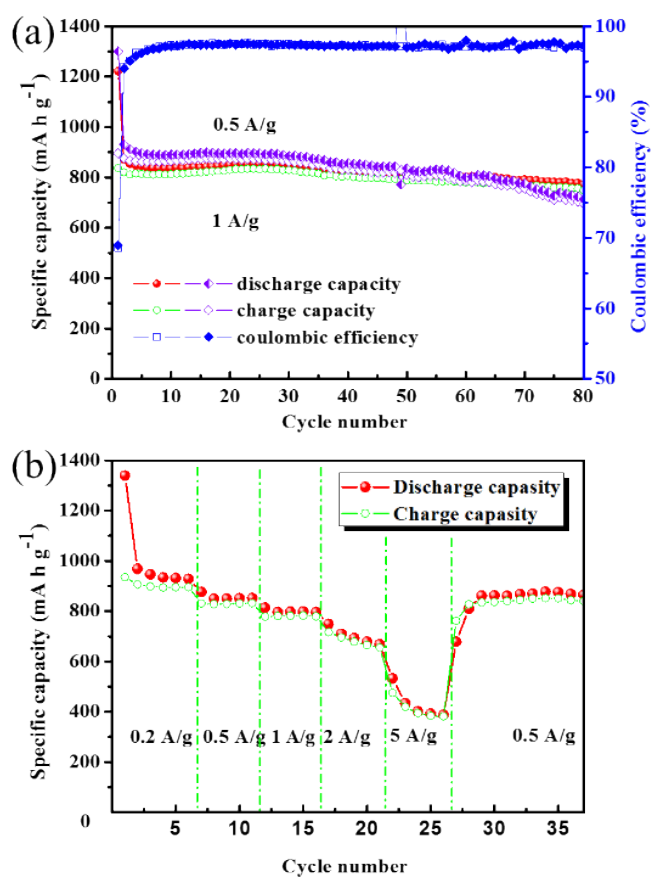


Figure S6 Cycle (a) and rate (b) performance of FO/C-H.

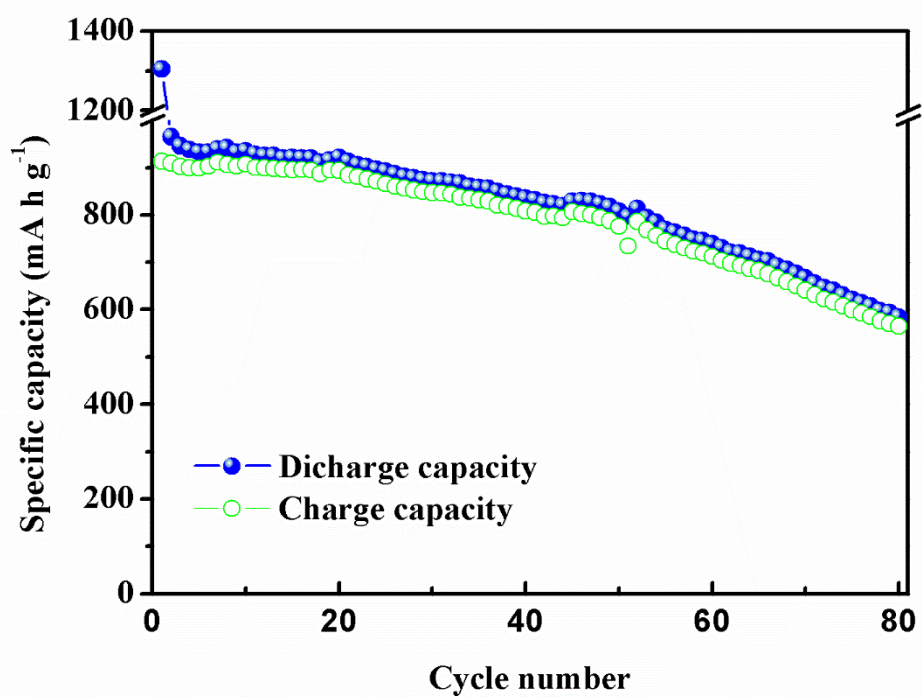


Figure S7. Cycle performance (1 A g^{-1}) of the $\gamma\text{-Fe}_2\text{O}_3/\text{C}$ hybrid with higher Fe_2O_3 content, which is obtained from $27\text{ g Fe(NO}_3)_3 \cdot 9\text{H}_2\text{O}$ and 10 g starch .