

Electronic Supplementary Information

Chemical-bowling Assisted Synthesis of Fe₃O₄@Starch Derived Carbon Composites as Anode Materials with Superior Cycling Stability for Lithium-ion Batteries

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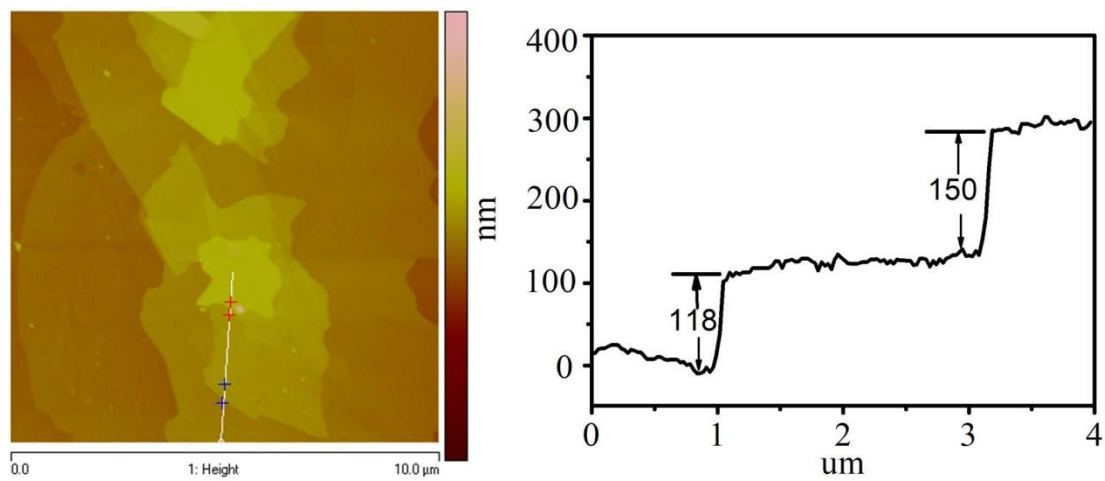


Figure S1. AFM image of C-SD.

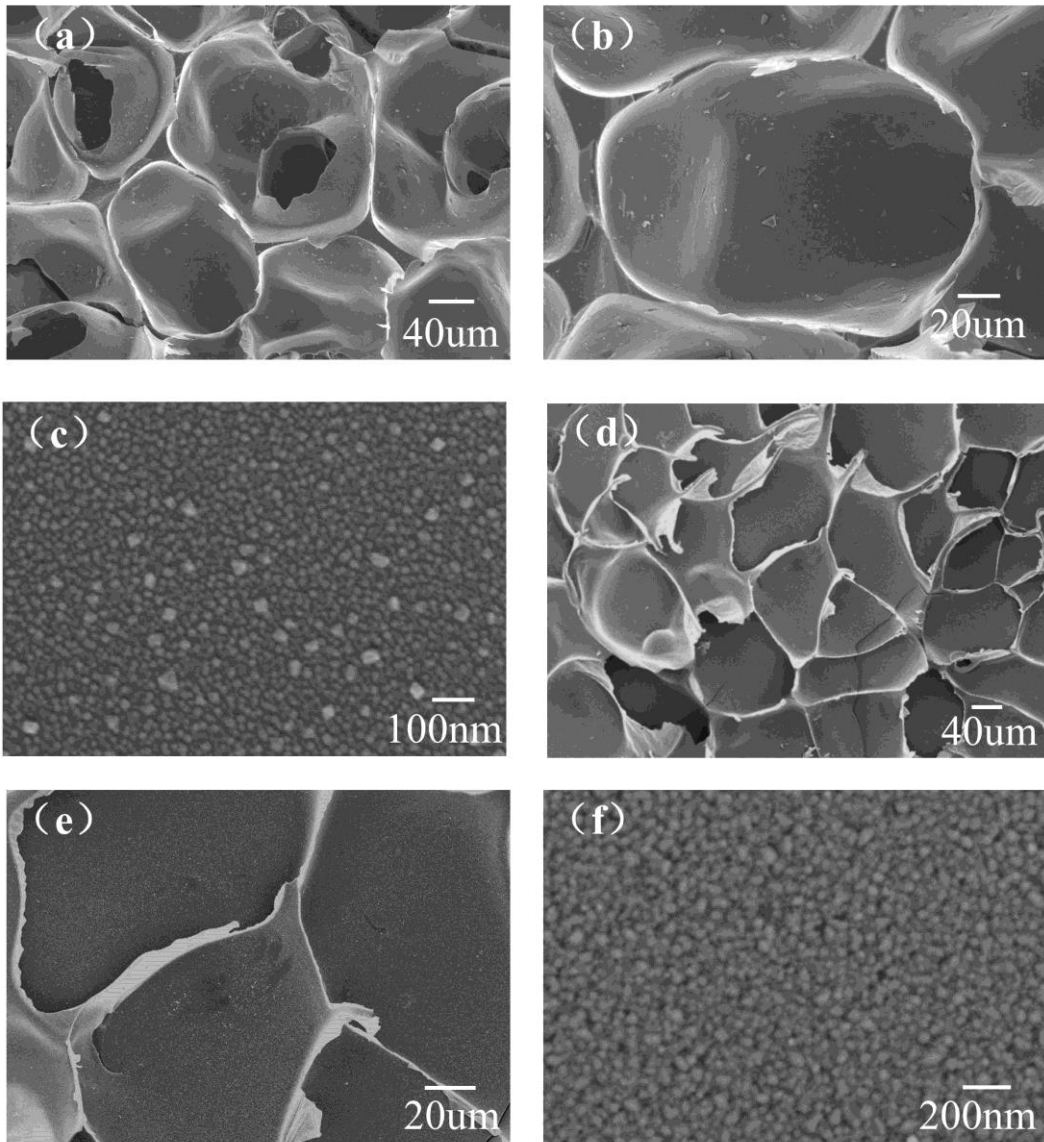


Figure S2. (a-c) FESEM images of Fe₃O₄@C-SD2 at different resolutions; (d-f) FESEM images of Fe₃O₄@C-SD3 composite at different resolution

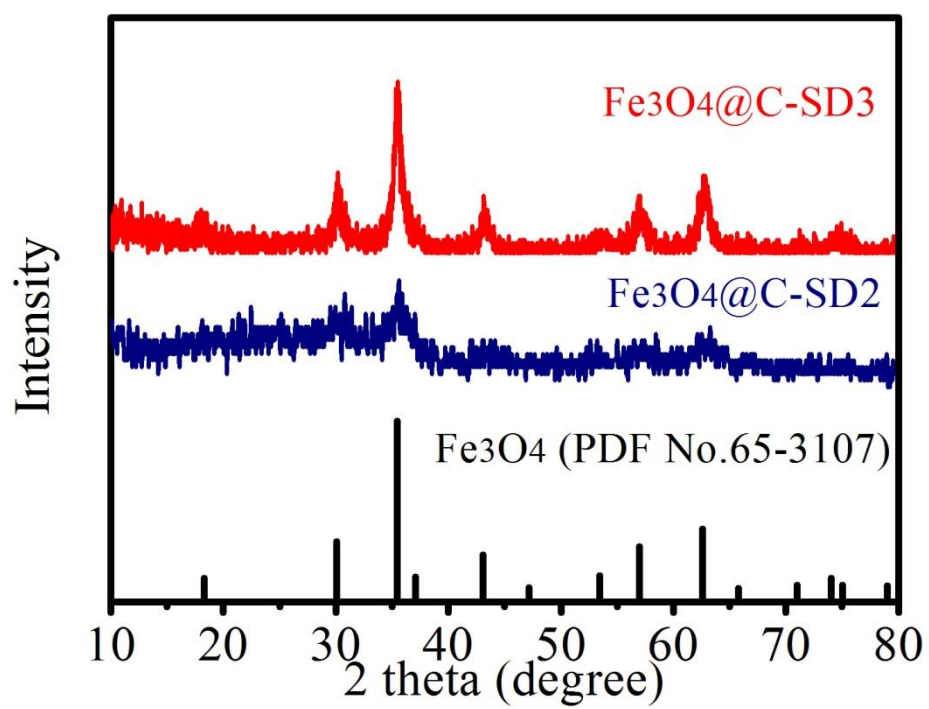


Figure S3. XRD patterns of Fe₃O₄@C-SD2 and Fe₃O₄@C-SD3

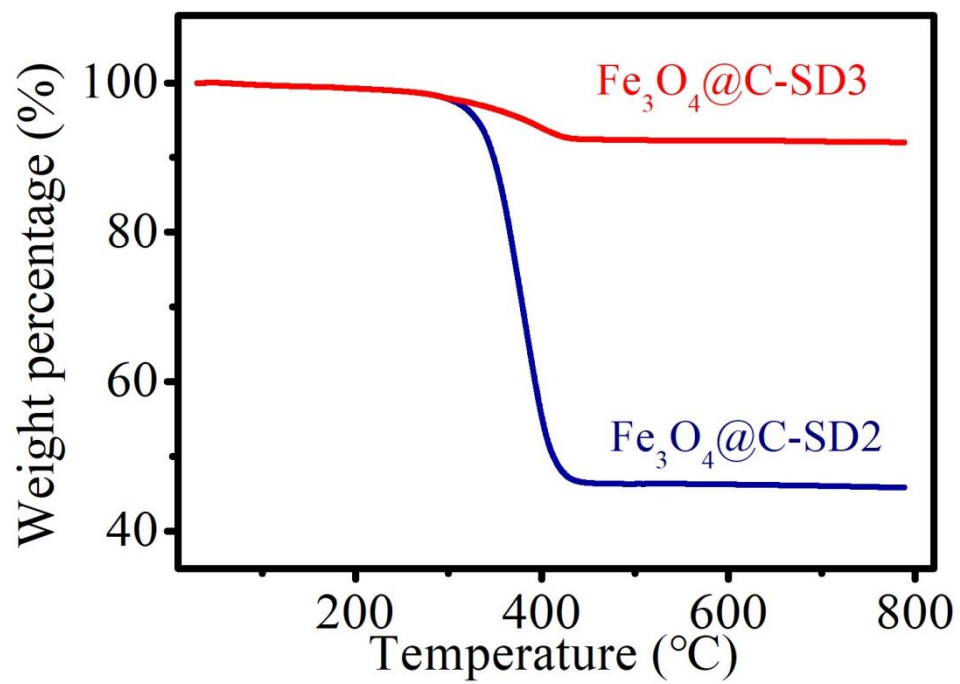


Figure S4. The TGA curves of Fe₃O₄@C-SD2 and Fe₃O₄@C-SD3.

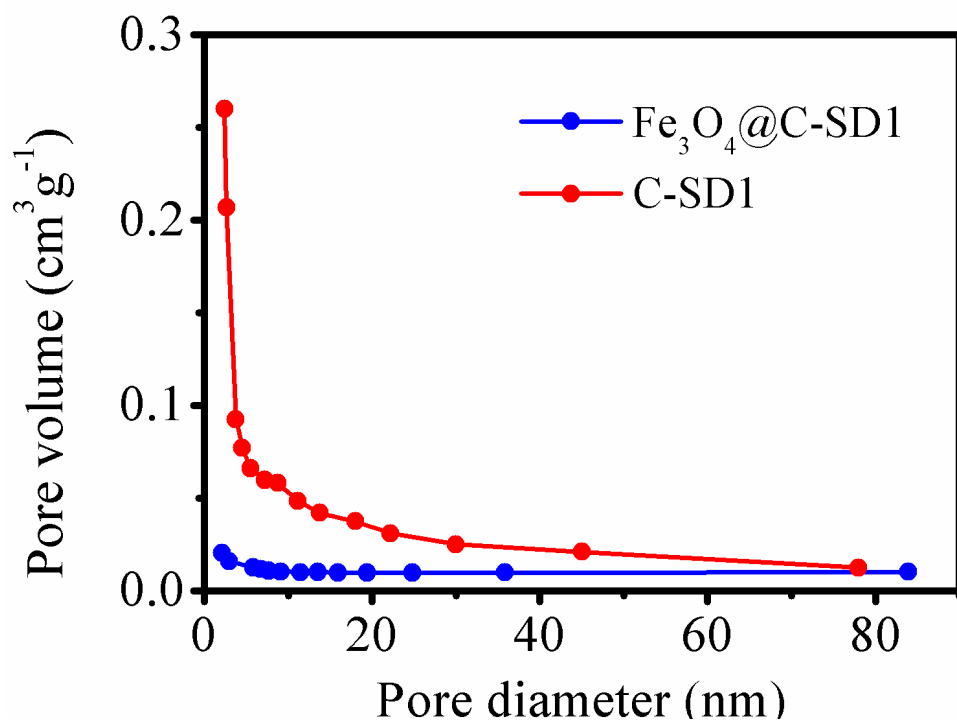


Figure S5. Pore size distribution of Fe₃O₄@C-SD1 and C-SD

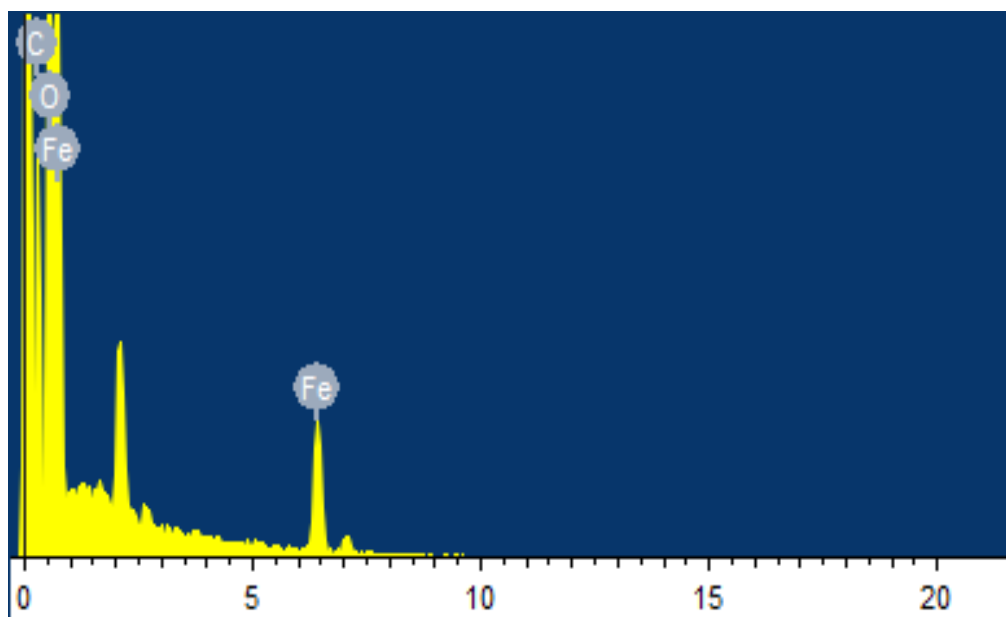


Figure S6. EDAX pattern of Fe₃O₄@C-SD1.

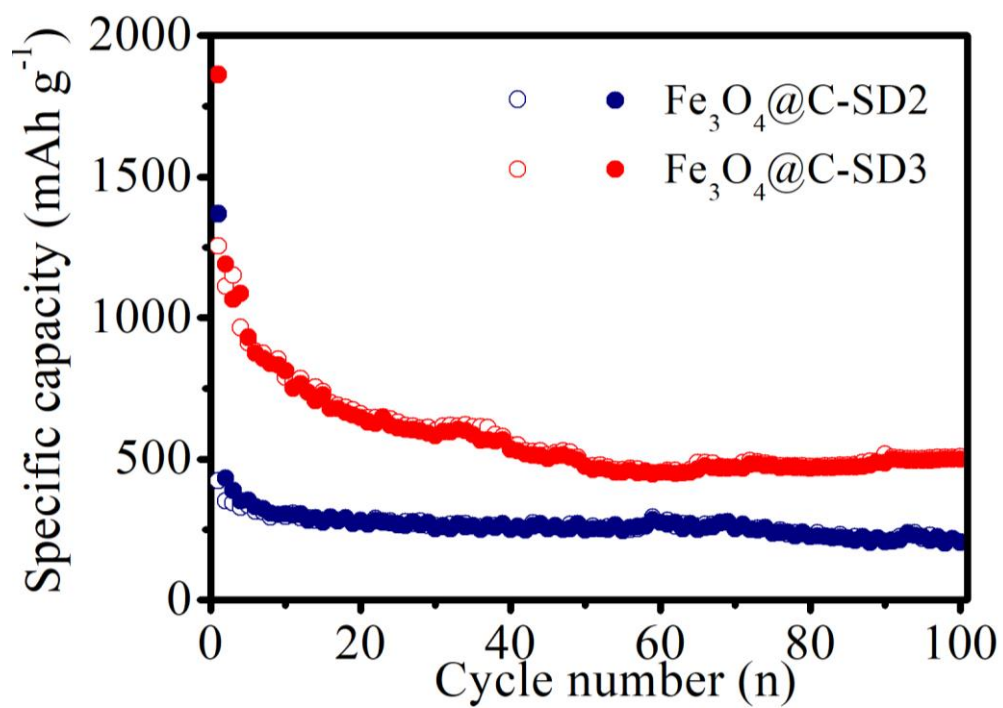


Figure S7. Cycling performance of Fe₃O₄@C-SD2 and Fe₃O₄@C-SD3 electrodes performed at current density of 0.2 A g⁻¹.

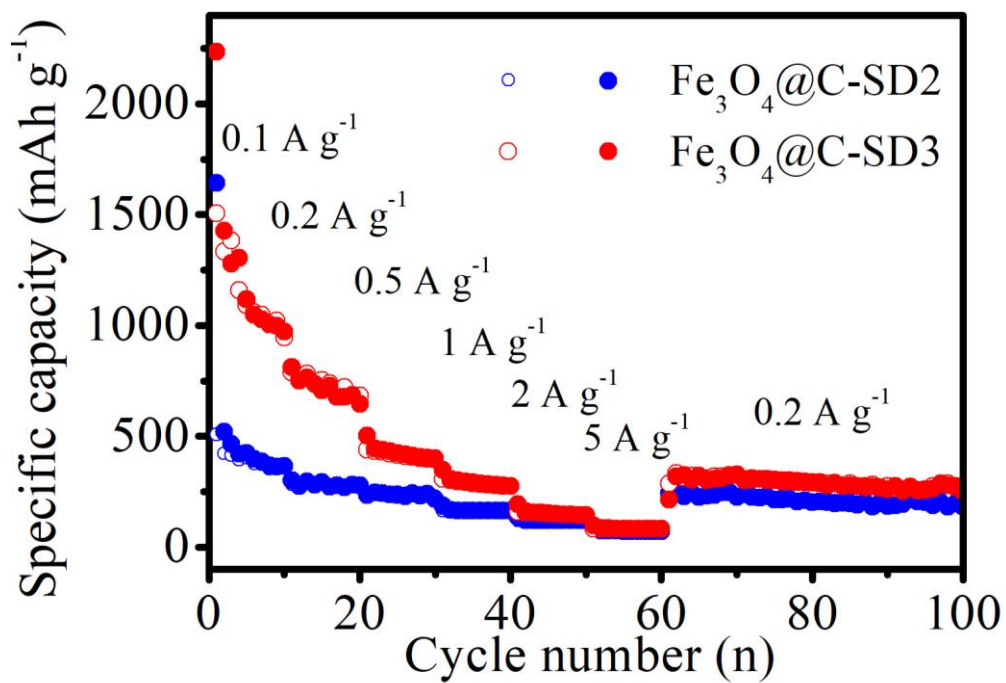


Figure S8. Rate performance of Fe₃O₄@C-SD2 and Fe₃O₄@C-SD3 electrodes

performed at various current densities.

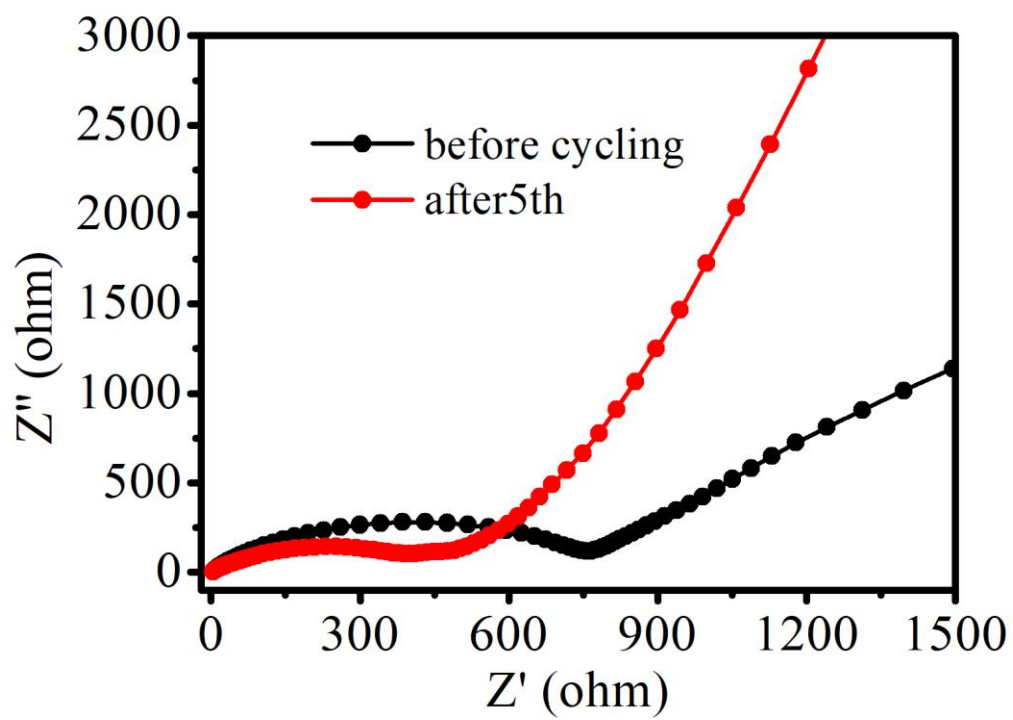


Figure S9.EIS spectrum of Fe₃O₄@C-SD1 electrode before cycling and after 5th cycles.