

## Supplementary information

### Mesoporous Fe<sub>3</sub>O<sub>4</sub>@C submicrospheres evolved from a novel self-corrosion mechanism for high-performance lithium-ion Batteries

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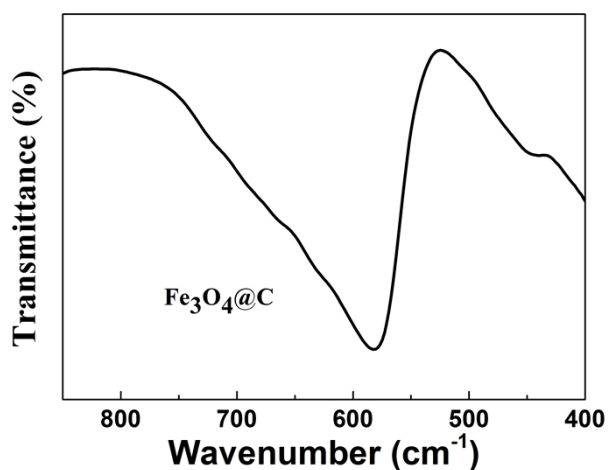


Figure S1 FT-IR spectra of Fe<sub>3</sub>O<sub>4</sub>@C submicrospheres in the 900-400 cm<sup>-1</sup> range

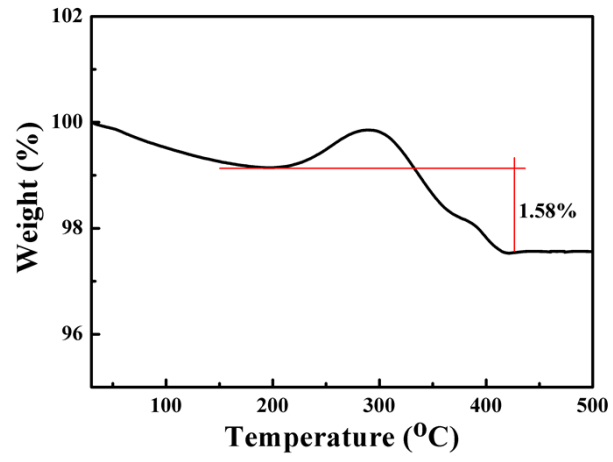


Figure S2 TGA curves of Fe<sub>3</sub>O<sub>4</sub>@C submicrospheres

Table S1 electrochemical performance comparison to previous work on Fe<sub>3</sub>O<sub>4</sub>@C anode material

Sample	Current density (mA g <sup>-1</sup> )	Cycle number	Reversible capacity (mA h g <sup>-1</sup> )	Ref.
Carbon-Encapsulated Fe <sub>3</sub> O <sub>4</sub> Nanoparticles	1000	100	998	1
Hollow Fe <sub>3</sub> O <sub>4</sub> /C beads	100	50	698	2
Fe <sub>3</sub> O <sub>4</sub> @C nanorings	200	160	923	3
C-Fe <sub>3</sub> O <sub>4</sub> nanospheres	200	60	712	4
Porous Fe <sub>3</sub> O <sub>4</sub> /C Microbelts	120	50	710	5
Carbon Coated Fe <sub>3</sub> O <sub>4</sub> Nanospindles	400	80	530	6
Mesoporous Fe <sub>3</sub> O <sub>4</sub> @C submicrospheres	100	50	930	This work

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