

Electronic Supplementary Information

In situ synthesis of hierarchical CoFe₂O₄ nanoclusters/graphene aerogels and their high performance for lithium-ion batteries

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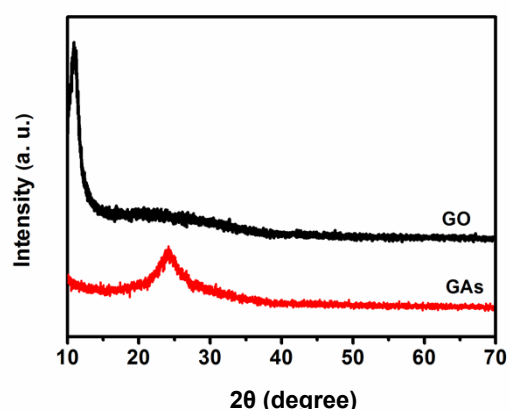


Fig. S1 XRD patterns of GO and GAs.

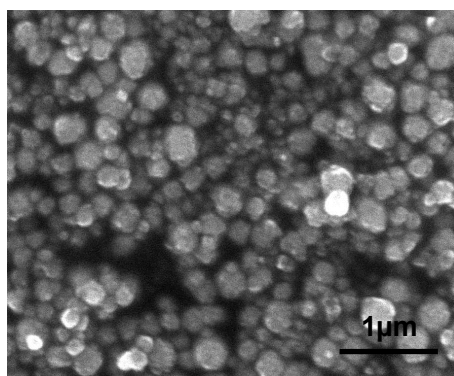


Fig. S2 SEM image of CoFe_2O_4 nanoclusters.

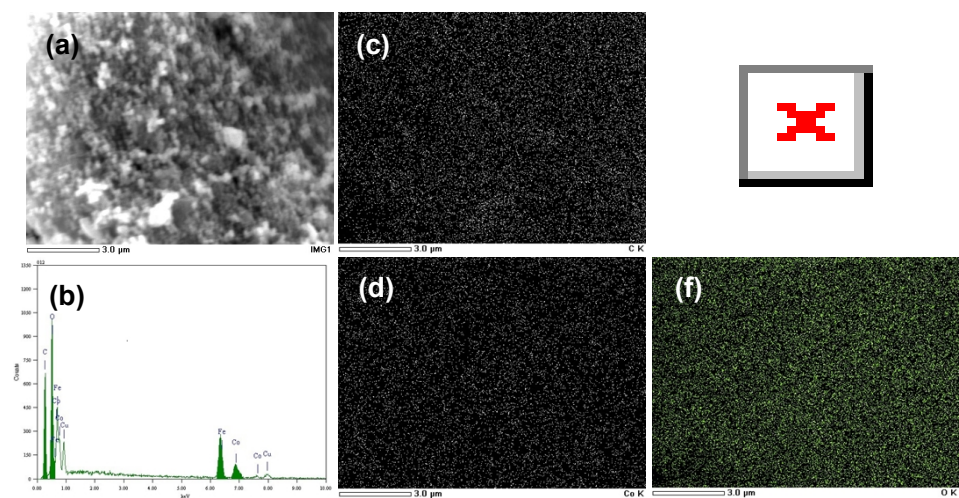


Fig. S3 (a) A low magnification SEM image of CoFe₂O₄/GAs composite. (b) A typical EDS spectrum. (c-f) C, Fe, Co, and O elemental mappings.

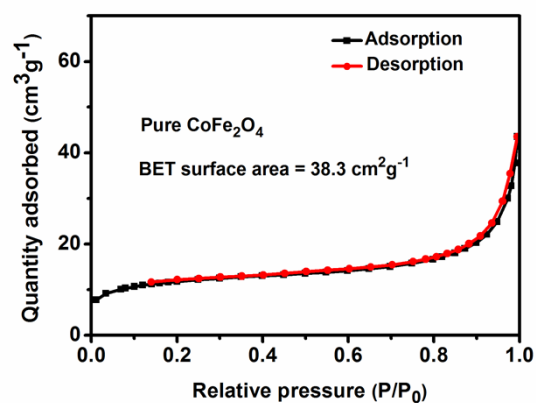


Fig. S4 Nitrogen adsorption/desorption isotherms of CoFe₂O₄ nanoclusters.

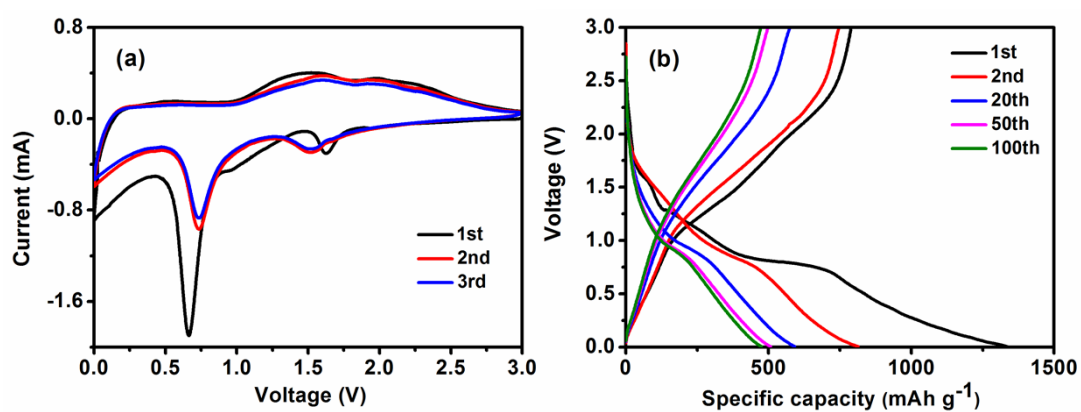


Fig. S5 (a) CV profiles of CoFe₂O₄ electrode at a scan rate of 0.1 mV s⁻¹. (b) Discharge/charge profiles of CoFe₂O₄ electrode.

Table S1. The general LIB performance of CoFe₂O₄/carbon anode materials.

Materials	Capacity (mAh/g)/cycle number (current density (mA/g))	Ref.
CoFe ₂ O ₄ /GAs	1070/100(100)	This work
CoFe ₂ O ₄ in carbon nanofibres	705/200(100)	[41]
CoFe ₂ O ₄ /CNT	910/50(0.15C)	[42]
CoFe ₂ O ₄ /N-doped graphene	800/240(0.1C)	[43]
Carbon@CoFe ₂ O ₄ /graphene	925.6/50(100)	[44]
CoFe ₂ O ₄ -graphene	1082/50(100)	[30]
CoFe ₂ O ₄ supported on XC-72	766/25(100)	[45]
CoFe ₂ O ₄ -RGO	1040/30(100)	[46]
CoFe ₂ O ₄ /C	200/90(100)	[47]