

Supplementary Material

Supplementary Figures

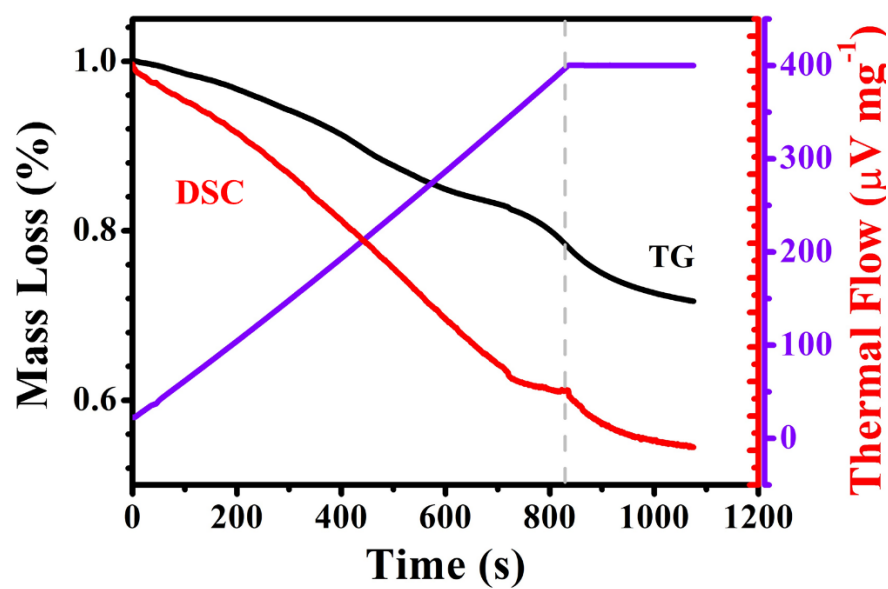


Figure S1. The TG/DSC curves of the FeOOH@CNT precursor simulated the annealing process under air atmosphere.

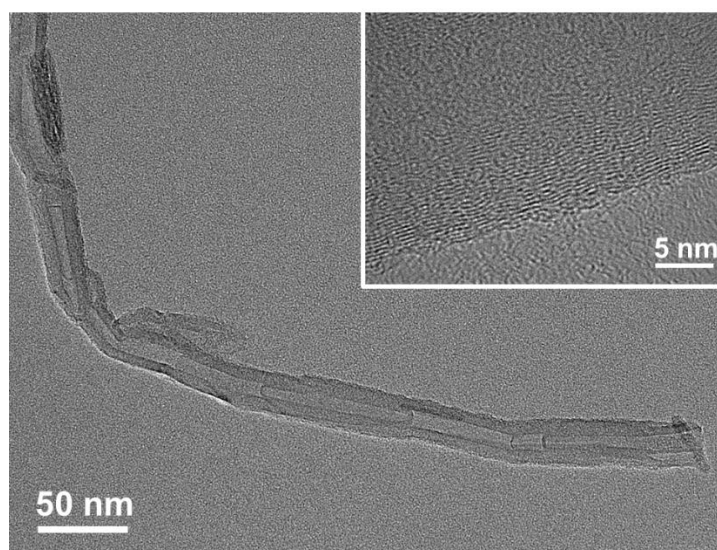


Figure S2. The TEM and HRTEM (inset) of images of CNT.

Supplementary Tables

Table S1. comparisons of electrochemical performance of the Fe₂O₃-HMNS@CNT with the recently reported non-precious metal/metal oxide-based materials for Li-O₂ batteries.

Reference	Type of material	Current density	Limited capacity	Cycle number
This work	Fe₂O₃-HMNS@CNT	200 mA g⁻¹	1000 mAh g⁻¹	100
1	TiCrOx	50 mA g ⁻¹	200 mAh g ⁻¹	20
2	CNT	200 mA g ⁻¹	1000 mAh g ⁻¹	50
3	Holey Graphene	0.2 mA cm ⁻²	2 mAh cm ⁻²	20
4	α -MnO ₂	200 mA g ⁻¹	1000 mAh g ⁻¹	70
5	3D Foam-Like NiCo ₂ O ₄	200 mA g ⁻¹	1000 mAh g ⁻¹	30
6	Co ₃ O ₄ / Ni foam	200 mA g ⁻¹	500 mAh g ⁻¹	80
7	graphitic porous carbon-Co ₃ O ₄	250 mA g ⁻¹	500 mAh g ⁻¹	50
8	Co ₃ O ₄ nanotube	25 μ A cm ⁻²	1000 mAh g ⁻¹	40

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