nanomaterials

Supplementary Information

Morphology-Controlled Synthesis of Hematite Nanocrystals and Their Optical, Magnetic and Electrochemical Performance

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Table S1. The morphologies and BET surface areas of α-Fe_2O_3 under different reaction conditions.

Morphology	BET (m^2/g)	$FeCl_3\cdot 6H_2O$(g)	NaH_2PO_4 (g)	Na_2SO_4 (g)	Temperature (°C)
Hollow nanoolives	33.67	0.648	0.009	0.009	230
Nanotubes	30.08	0.324	0.009	0.009	230
Nanospindles	23.57	0.324	0.009	0	230
Nanoplates	14.19	0.324	0	0.009	230

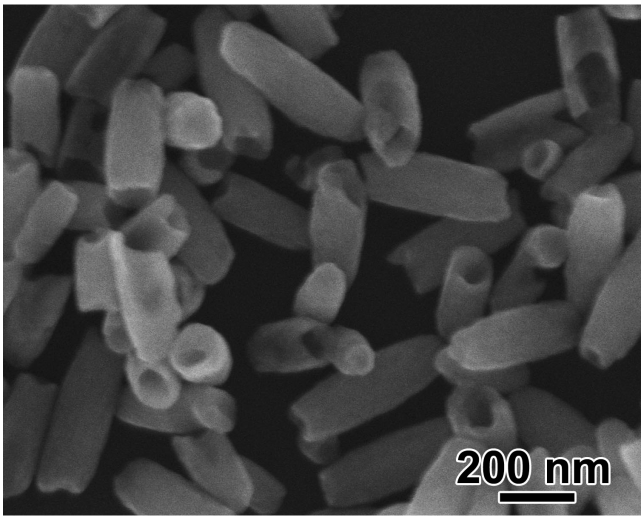

Figure S1. Scanning electron microscope (SEM) image of the nanotubes.

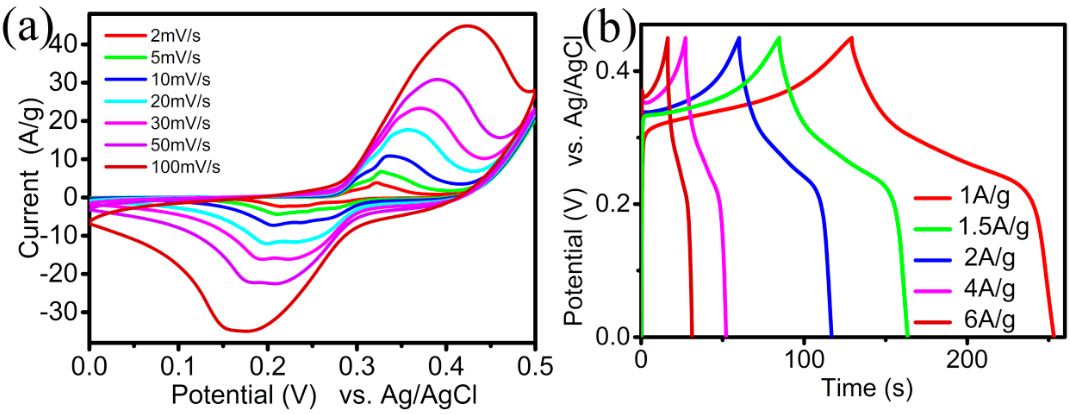

Figure S2. (**a**) Cyclic voltammetry (CV) curves of the hollow olive-shaped α-Fe_2O_3 electrodes at different scan rates; (**b**) Galvanostatic charge-discharge curves of the hollow olive-shaped α-Fe_2O_3 electrodes at various current densities.