

Figure S1. EDS spectrum of the as-obtained  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> urchin-like nanostructures

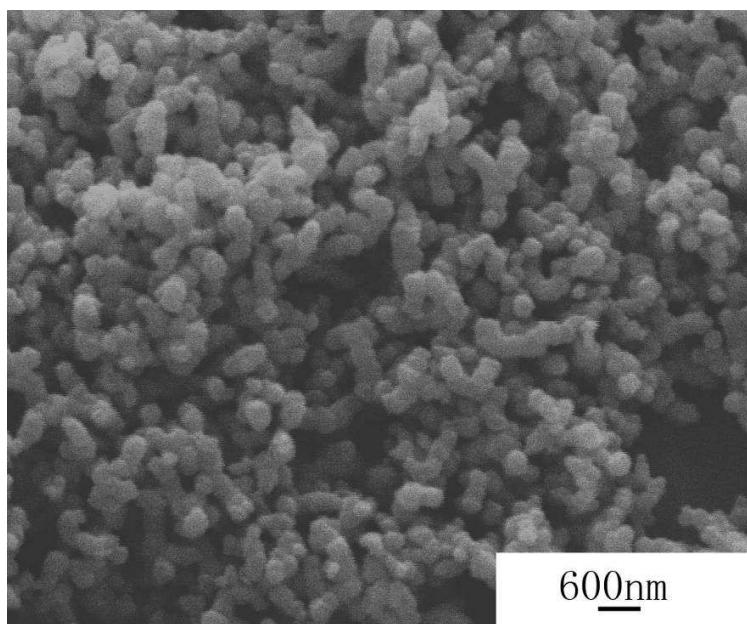


Figure S2. SEM image of the as-sold  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub>

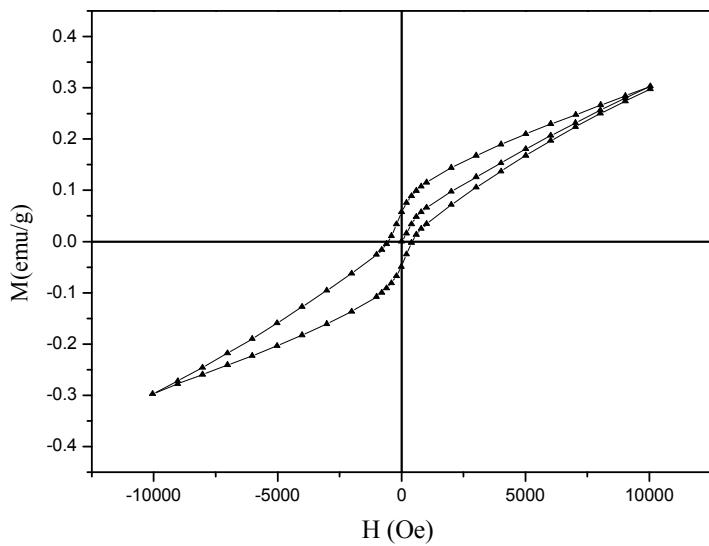


Figure S3. Hysteresis loop for the as-sold  $\alpha$ - $\text{Fe}_2\text{O}_3$ ;