

Supplementary Material (ESI) for Journal of Materials Chemistry
This journal is (c) The Royal of Chemistry 2010

One-pot synthesis of hierarchical magnetite nanochain assemblies with complex building units and their application for water treatment

Min-Rui Gao, Shi-Ran Zhang, Jun Jiang, Ya-Rong Zheng, Dong-Qing Tao, Shu-Hong Yu*

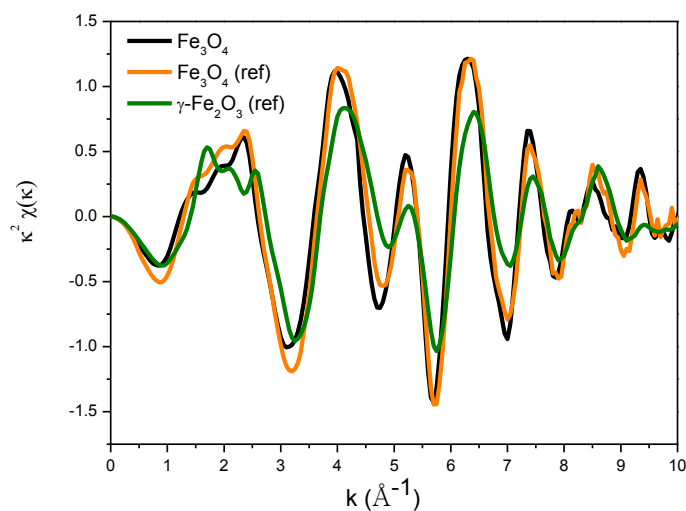


Fig. S1 k^2 -weighted EXAFS spectra of Fe K-edge from the self-assembled Fe_3O_4 nanostructures, referential Fe_3O_4 and referential $\gamma\text{-Fe}_2\text{O}_3$ samples.

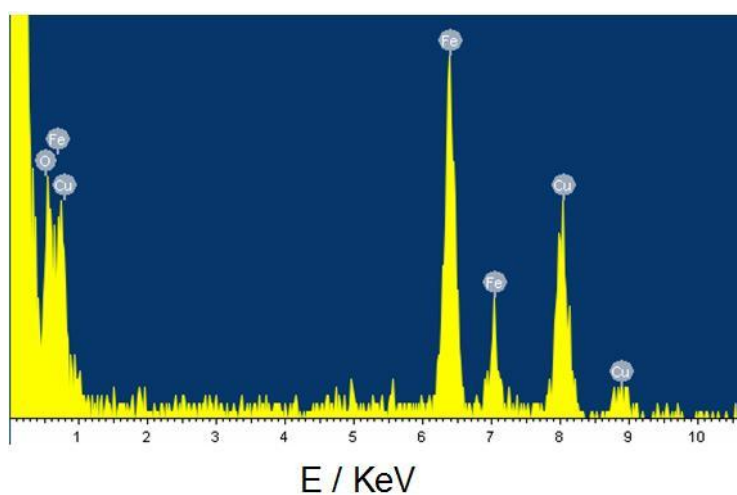


Fig. S2 Energy-disperse X-ray Spectrum (EDX) taken on a typical flower-like building unit of the hierarchical Fe_3O_4 nanochain assemblies.

Supplementary Material (ESI) for Journal of Materials Chemistry
This journal is (c) The Royal of Chemistry 2010

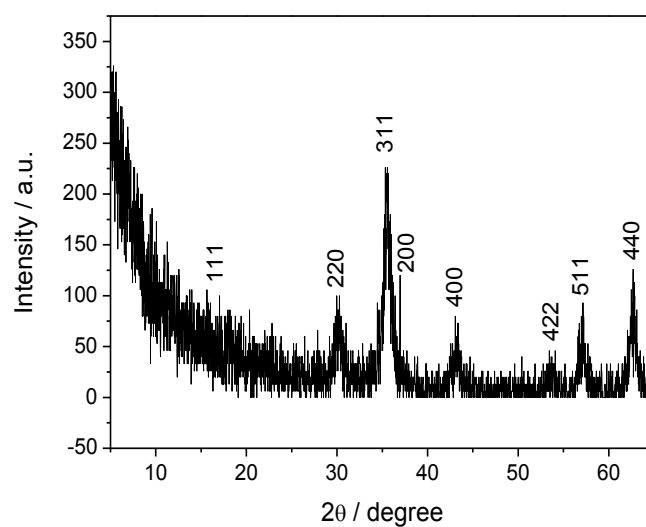


Fig. S3 XRD pattern of the particles collected after the removal of dye molecules.

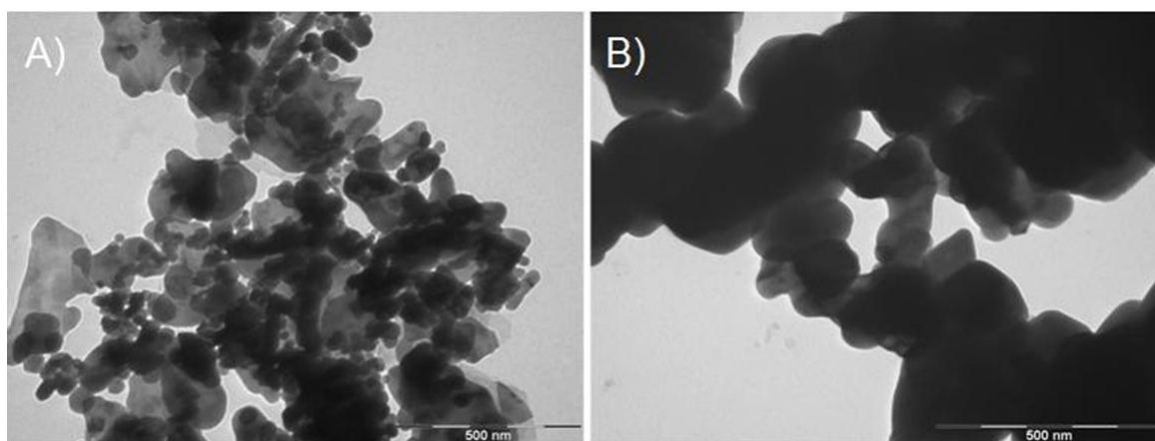
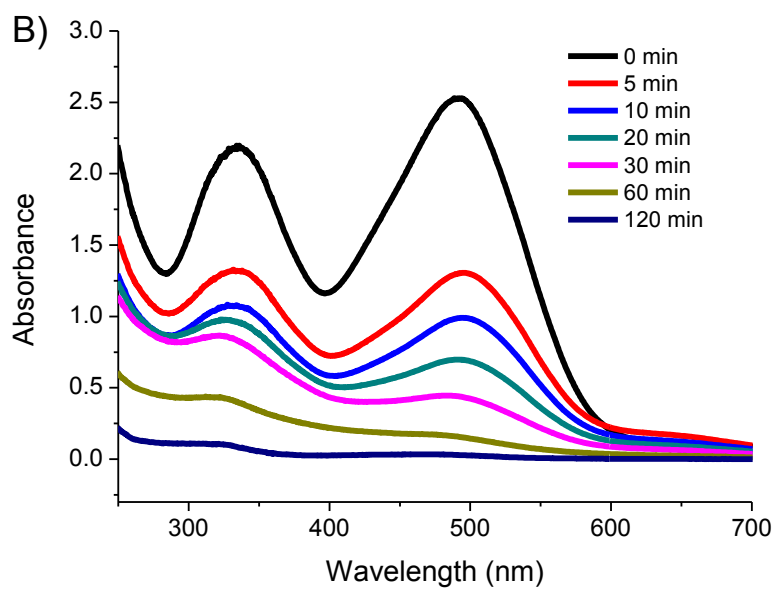
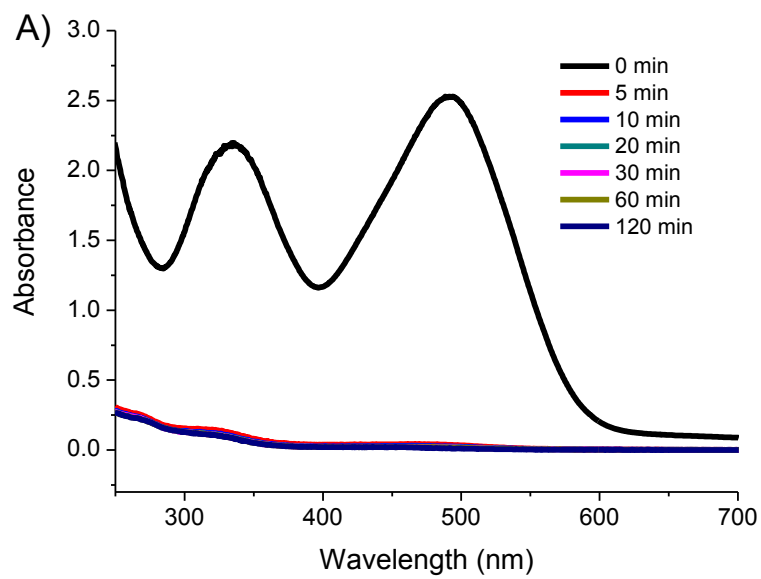


Fig. S4 TEM images of A) commercial Fe₃O₄ and B) commercial γ-Fe₂O₃ materials.

Supplementary Material (ESI) for Journal of Materials Chemistry
This journal is (c) The Royal of Chemistry 2010



Supplementary Material (ESI) for Journal of Materials Chemistry
This journal is © The Royal Society of Chemistry 2010

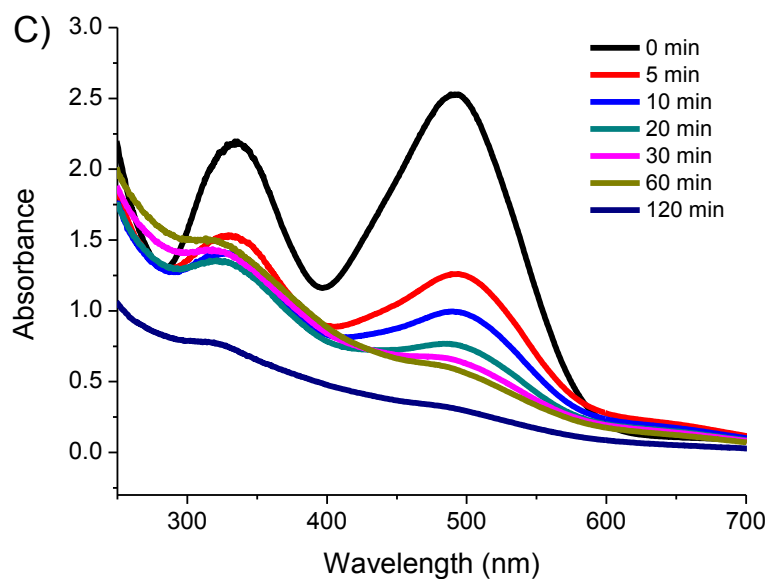


Fig. S5 Absorption spectra of solutions of Congo red (100 mg/L, 20 mL) in the presence of A) novel Fe₃O₄ assemblies; B) secondary; C) third renewed materials at time intervals (min) of 0; 10; 20; 30; 60; 120, respectively.