Supporting Information

for

Facile Fabrication of Heterostructured cubic-CuFe₂O₄/ZnO

Nanofibers (c-CFZs) with Enhanced Visible-light Photocatalytic

Activity and Magnetic Separation

Chuchu Lu,^a Zhimin Bao,^a Chuanxiang Qin,^{*a} Lixing Dai^a and Aiping Zhu^b

^a College of Chemistry, Chemical Engineering and Materials Science, Soochow University, Suzhou, Jiangsu, 215123, People's Republic of China. E-mail: qinchuanxiang@suda.edu.cn; Fax: +86-0512-65883354; Tel: +86-0512-65883354.

^b College of Chemistry and Chemical Engineering, Yangzhou University, Yangzhou, Jiangsu, 225002, People's Republic of China.

S1 and S2 Preparation of c-CuFe₂O₄ nanofibers.

The c-CuFe₂O₄ nanofibers were prepared via a simple and economical technique of electrospinning technique combined with coprecipitation method. From figure S1 and S2, the main crystal peak position (311) and the morphology of c-CuFe₂O₄ nanofibers changed under different temperature. Comparing the results of XRD patterns and SEM images, the c-CuFe₂O₄ nanofibers prepared at 600 °C was the best calcination temperature.



Figure S1 XRD patterns of c-CuFe₂O₄ nanofibers prepared under different temperature: (a) 500 °C, (b). 600 °C, (c) 650 °C, (d) 700 °C.



Figure S2 SEM images of c-CuFe₂O₄ nanofibers prepared under different temperature: (a) 500 °C, (b). 600 °C, (c) 650 °C, (d) 700 °C.



Figure S3 The change of the absorption spectra of RhB solutions with irradiation time under visible light at the presence of c-CFZs.



Figure S4 The changes color of RhB solutions (a) before the degradation: 0 h, (b) after the degradation: 6 h.



Figure S5 XRD patterns of ZnO particles.