Supporting Information

Zn(II)-doped \(\gamma\)-Fe\(_2\)O\(_3\) single-crystalline nanoplates with high phase-transition temperature, superparamagnetic property and good photocatalytic property

Shuang Yang, Yanyan Xu*, Yanyan Cao, Guoying Zhang, Yaqiu Sun, Dongzhao Gao

Fig. S1 XPS fully scanned spectra of the as-obtained \(\gamma\)-Fe\(_2\)O\(_3\) nanoplates with 0.08g of Zn(Ac)\(_2\) and calcined at 350 °C for 2 h.

![XPS fully scanned spectra](image1)

Fig. S2 EDS spectrum of the as-obtained \(\gamma\)-Fe\(_2\)O\(_3\) nanoplates with 0.08g of Zn(Ac)\(_2\) and calcined at 350 °C for 2 h.

![EDS spectrum](image2)

Fig. S3 nitrogen adsorption-desorption isotherm of the precursor (a) and the \(\gamma\)-Fe\(_2\)O\(_3\) nanoplates

![NITROGEN ADSORPTION-DESORPTION ISOTHERM](image3)
obtained by calcining the precursor at 350 °C for 2 h (b).
Fig. S4 EDS spectrum of the $\gamma$-Fe$_2$O$_3$ nanoplates obtained with different amount of Zn(Ac)$_2$ and calcined at 350 °C for 2 h: (a) 0.02g, (b) 0.12g.