Supplementary Materials

Synthesis of Magnetic α-Fe_2O_3/Rutile TiO_2 Hollow Spheres for Visible-Light Photocatalytic Activity

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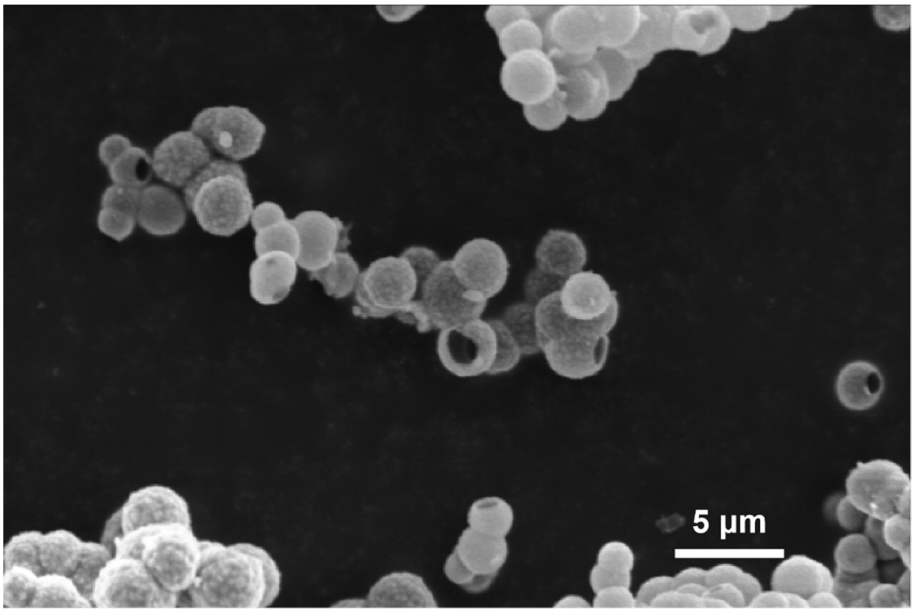

Figure S1. SEM image of α-Fe_2O_3/Rutile TiO_2 (0.025 mM) placed after 3 months. The morphology and structure of the as synthesized sample is almost no change.

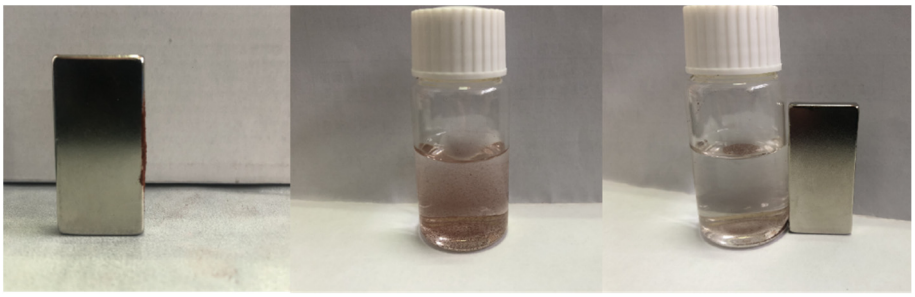

Figure S2. Image of Magnet adsorbs α-Fe_2O_3/Rutile TiO_2 (0.025 mM).

Table S1. The values of remnant magnetization (Mr) and coercivity (Hc) of the samples.

Samples	Time (h)	Mr (emug $^{-1}$)	Hc (Oe)
α-Fe_2O_3/RT (0 mM)	48 h	0.005	75
α-Fe_2O_3/RT (0.025 mM)	48 h	0.042	565.74
α-Fe_2O_3/RT (0.042 mM)	48 h	0.029	669.65
α-Fe_2O_3	48 h	0.37	372
RT	6 h	0.09	174.9

Table S2. Comparison of the photocatalytic performances of other materials.

Materials	Light source	Time (min)	Photodegradation Amount (%)	Ref
Rutile TiO_2	Artificial solar light	300 min	70% RhB	[1]
α-Fe_2O_3/Anatase TiO_2	Visible light	100 min	86% RhB	[2]
Fe_2O_3/Anatase TiO_2	Visible light	100 min	85% RhB	[3]
1D Fe_2O_3@Anatase TiO_2	Visible light	360 min	86.53% RhB	[4]
α-Fe_2O_3(Al)@Anatase TiO_2	UV-light	100 min	90% RhB	[5]
α-Fe_2O_3/Rutile TiO_2	Visible light	100 min	93% RhB	This work

Reference

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