Supplementary

Facile Production of a Fenton-Like Photocatalyst by Two-Step Calcination with a Broad pH Adaptability

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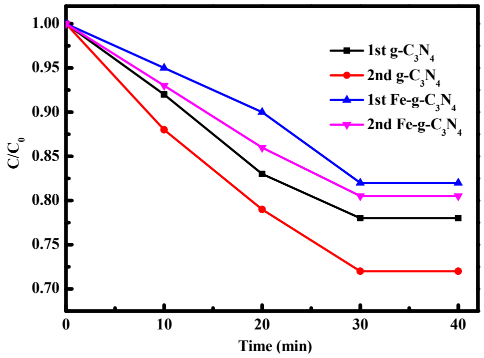

Figure S1. The dark adsorption of RhB by catalysts.

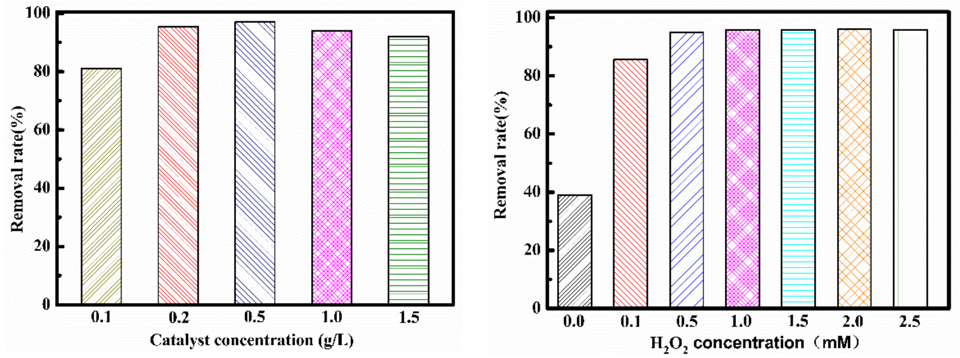

Figure S2. The effects of second Fe-g-C_3N_4 and H_2O_2 concentration on RhB degradation efficiency. The second Fe-g-C_3N_4 dosage was 20mg.

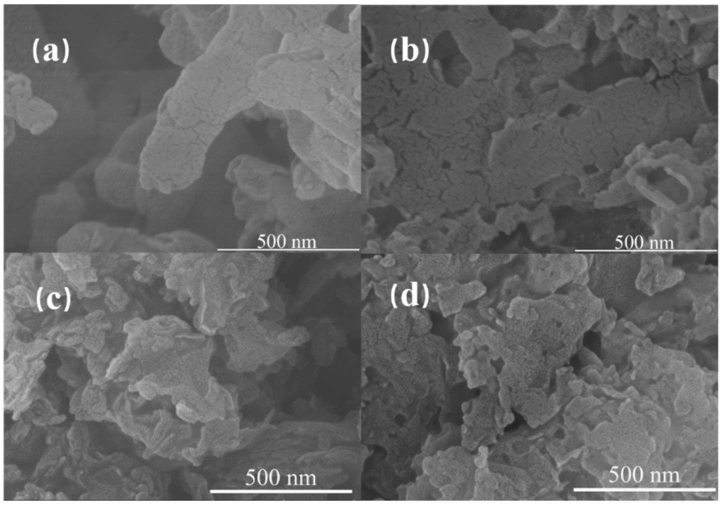

Figure S3. SEM micrograph of 1st-g-C_3N_4 (a), 1st-Fe-g-C_3N_4 (b), second g-C_3N_4(c), and 2nd Fe-g-C_3N_4 (d).

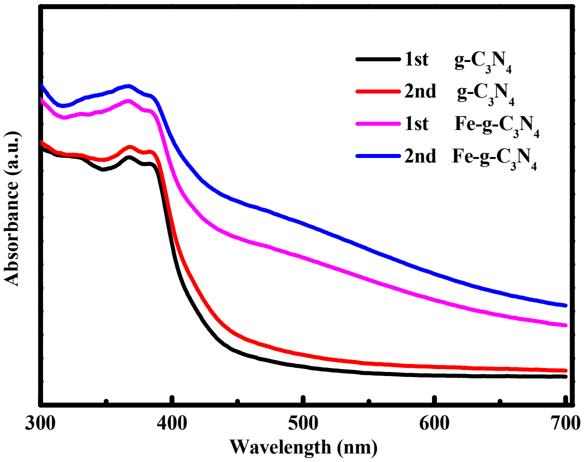

Figure S4. The UV-vis diffuse reflectance spectra of 1st-g-C_3N_4 , 1st-Fe-g-C_3N_4, 2nd g-C_3N_4 and second Fe-g-C_3N_4 .

Table S1. Structure parameters of the four samples.

Sample	Specific Surface area (m^2/g)	Pore diameter (nm)	Pore volume (cc/g)
1st-g-C_3N_4	56.779	15.827	0.243
2nd g-C_3N_4	78.535	21.601	0.388
1st-Fe-g-C_3N_4	45.605	16.553	0.162
2nd Fe-g-C_3N_4	63.521	22.592	0.248

Table S2. Atomic content (at %) from XPS analysis for samples.

Samples	C	N	O	Fe
1st-g-C_3N_4	42.43	53.81	3.75	
2nd-g-C_3N_4	43.84	51.59	4.59	
1st-Fe-g-C_3N_4	43.13	50.92	4.71	1.24
2nd-Fe-g-C_3N_4	40.91	50.58	7.07	1.44