

Supporting Information

Novel Co-doped Fe₃O₄/Bi₂WO₆ core-shell Magnetic Photocatalysts with enhanced photocatalytic degradation of contaminants

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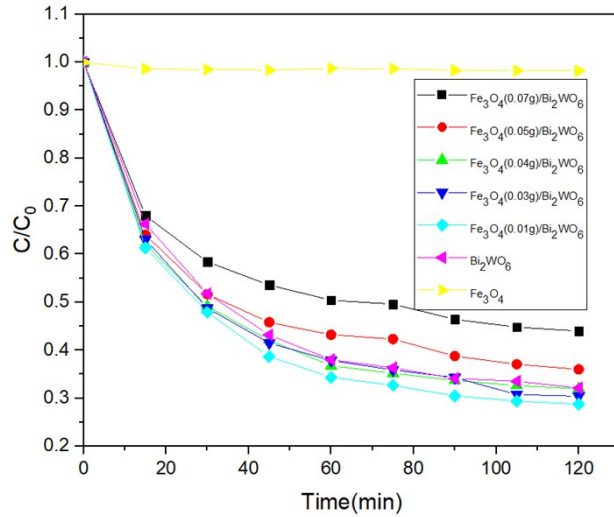


Figure S1 photocatalytic activity evaluation of $\text{Fe}_3\text{O}_4(x)/\text{Bi}_2\text{WO}_6$

Comparison of magnetic strength

A certain amount of $\text{Fe}_3\text{O}_4(x)/\text{Bi}_2\text{WO}_6$ was placed on a magnetic stirrer, we observed the movement of the sample. The movement of $\text{Fe}_3\text{O}_4(0.01 \text{ g})/\text{Bi}_2\text{WO}_6$ is not good, only a part of the particles can be rotated, and about half of the powder does not exhibit magnetism. The movement of $\text{Fe}_3\text{O}_4(0.07 \text{ g})/\text{Bi}_2\text{WO}_6$ is best. Other samples (0.03 g, 0.04 g, 0.05 g) have similar movements. When we use the key to stir the sample, the sample particles can quickly restore the original state of motion. This test indicates that the magnetic properties of the composite sample increase as the amount of Fe_3O_4 increases.

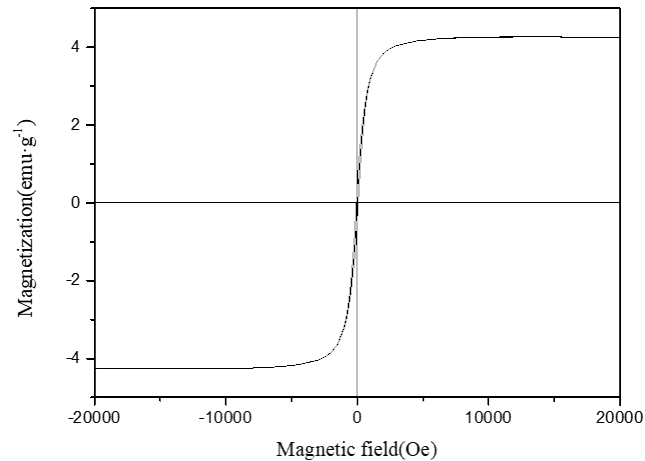


Figure S2 Magnetization curves of $\text{Fe}_3\text{O}_4(0.04 \text{ g})/\text{Bi}_2\text{WO}_6$.

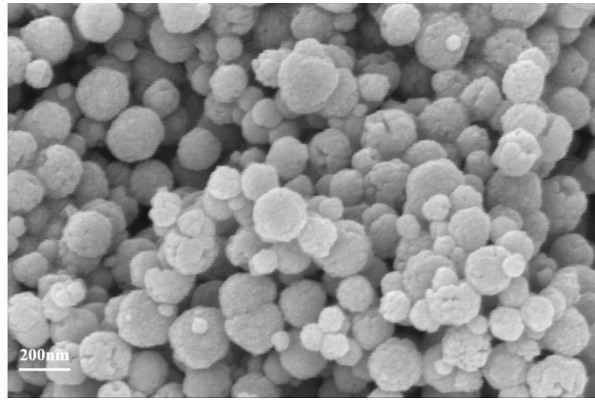


Figure S3 SEM images of Fe_3O_4 .

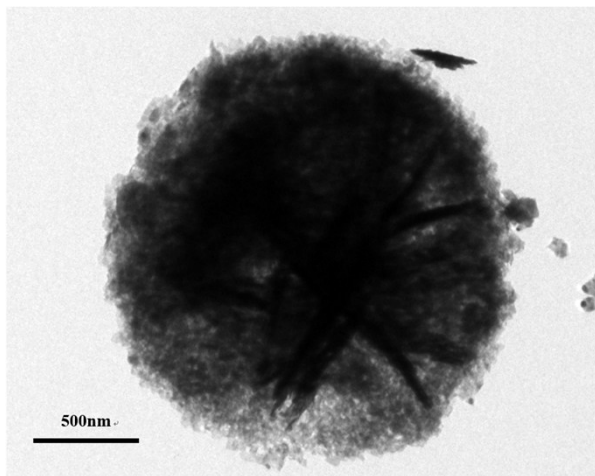


Figure S4 TEM images of $1\%\text{Co}^{2+}\text{-Fe}_3\text{O}_4(0.04\text{ g})/\text{Bi}_2\text{WO}_6$.