

Electronic Supplementary Information for

A novel magnetic recyclable photocatalyst based on a core-shell metal-organic framework $\text{Fe}_3\text{O}_4@\text{MIL-100}(\text{Fe})$ for the decolorization of methylene blue dye

Chao-Feng Zhang, Ling-Guang Qiu*, Fei Ke, Yu-Jun Zhu, Yu-Peng Yuan, Geng-Sheng

Xu and Xia Jiang

* E-mail address: lgqiu@ahu.edu.cn

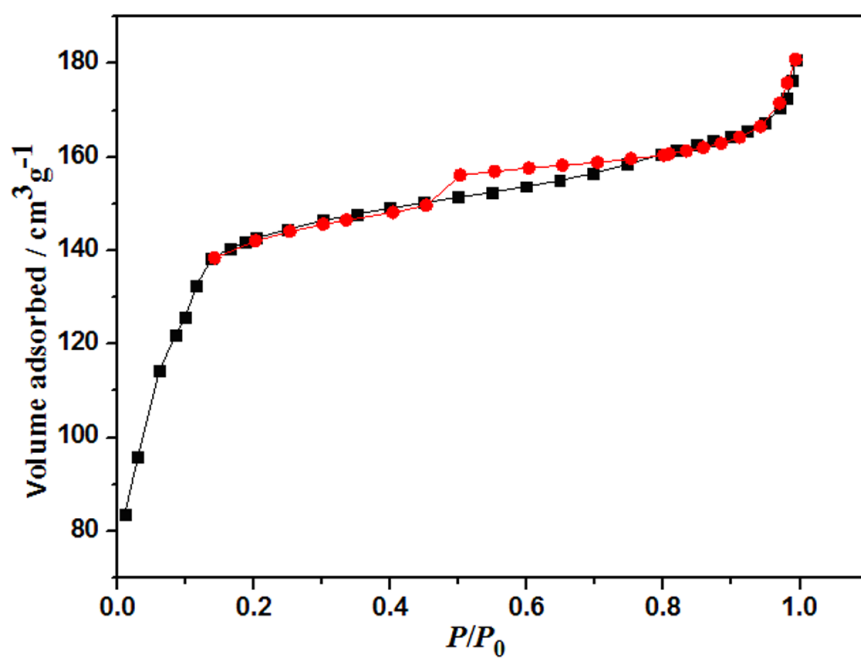


Fig. S1 Nitrogen adsorption-desorption isotherms of the as-synthesized $\text{Fe}_3\text{O}_4@\text{MIL-100}(\text{Fe})$ microspheres.

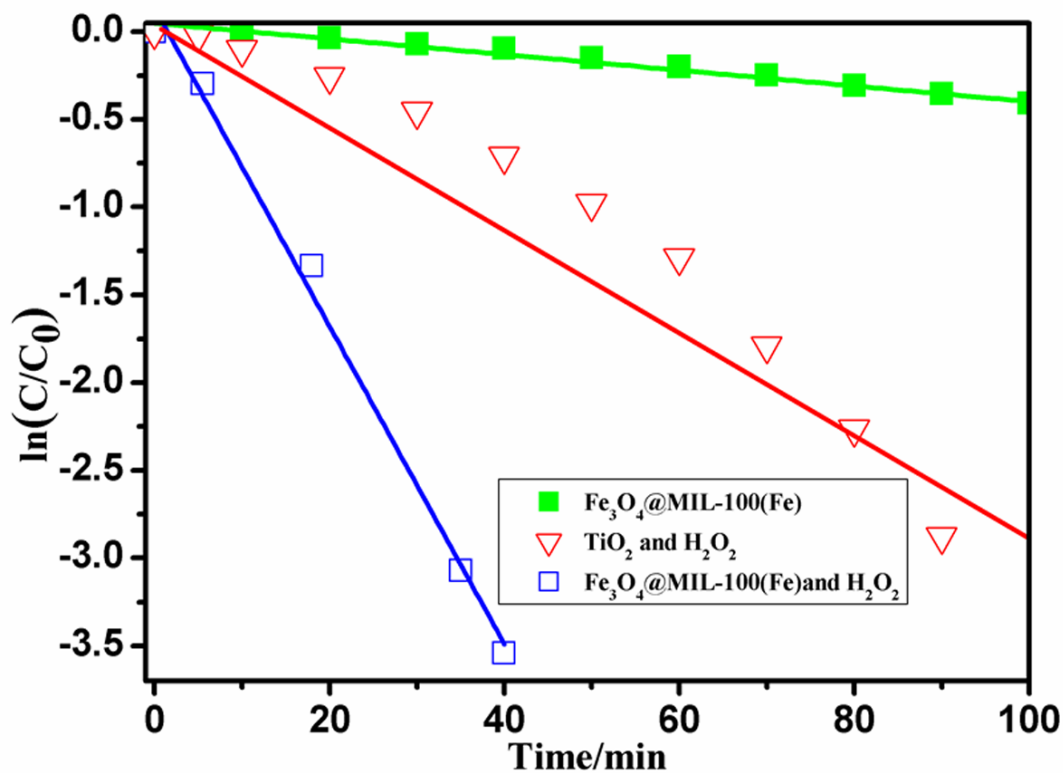


Fig. S2 First-order kinetics plot for the photodegradation of MB by $\text{Fe}_3\text{O}_4@\text{MIL-100(Fe)}$, TiO_2 and H_2O_2 , $\text{Fe}_3\text{O}_4@\text{MIL-100(Fe)}$ and H_2O_2 under the irradiation of UV-vis light.

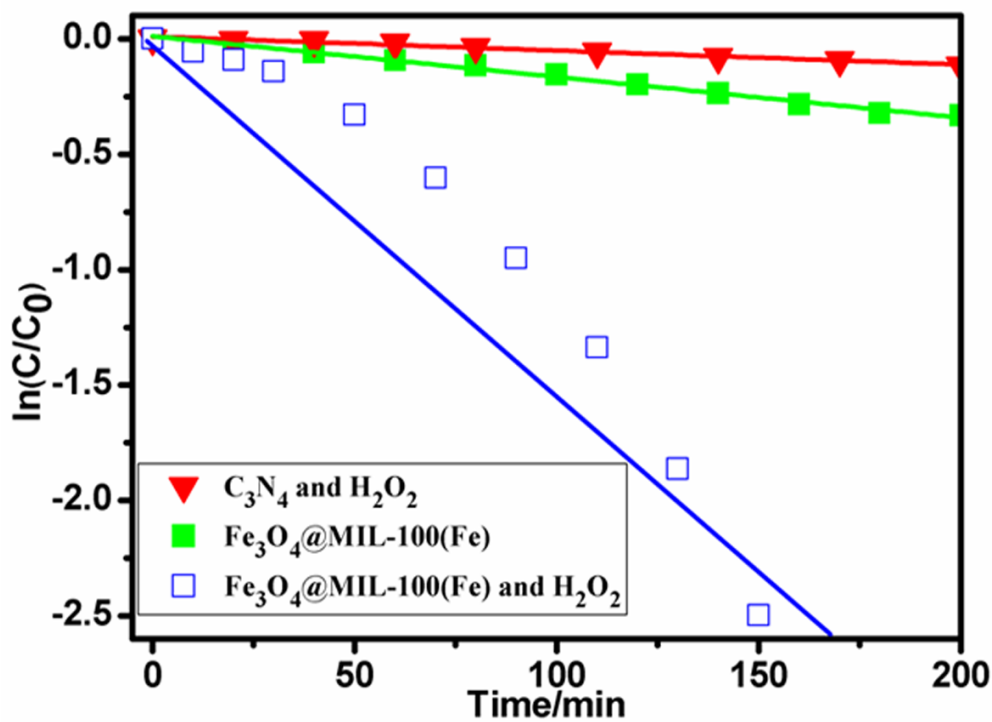


Fig. S3 First-order kinetics plot for the photodegradation of MB by $\text{Fe}_3\text{O}_4@\text{MIL-100(Fe)}$, C_3N_4 and H_2O_2 , $\text{Fe}_3\text{O}_4@\text{MIL-100(Fe)}$ and H_2O_2 under the irradiation of visible light.

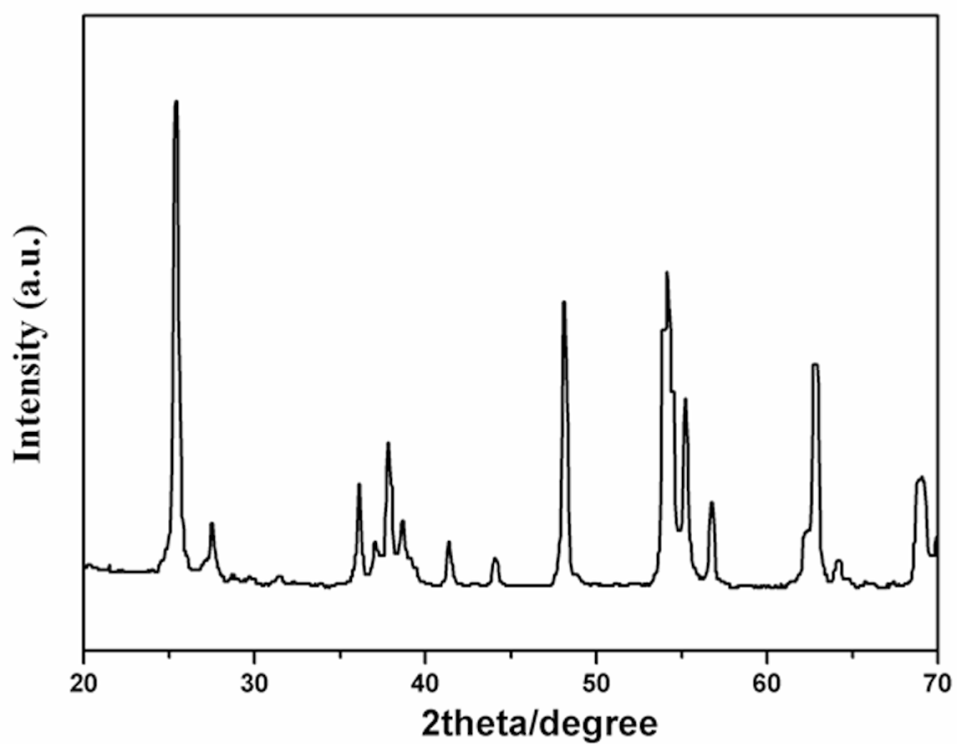


Fig. S4 PXRD pattern of the as-prepared N-doped TiO₂ in the present work.