

## **Enhanced photoreduction degradation of polybromodiphenyl ethers with Fe<sub>3</sub>O<sub>4</sub>-g-C<sub>3</sub>N<sub>4</sub> under visible light irradiation**

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## Supplementary materials

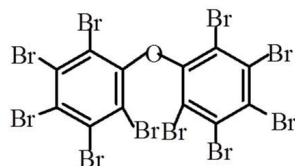


Fig. S1. The structure of BDE209

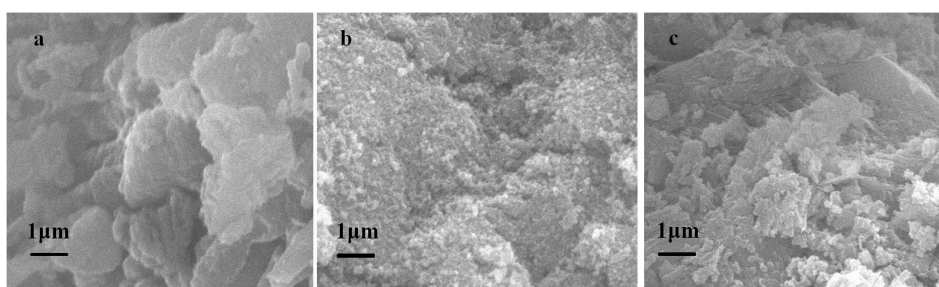


Fig. S2 SEM images of (a)g-C<sub>3</sub>N<sub>4</sub>; (b) Fe<sub>3</sub>O<sub>4</sub>; (c) FeOCN-4

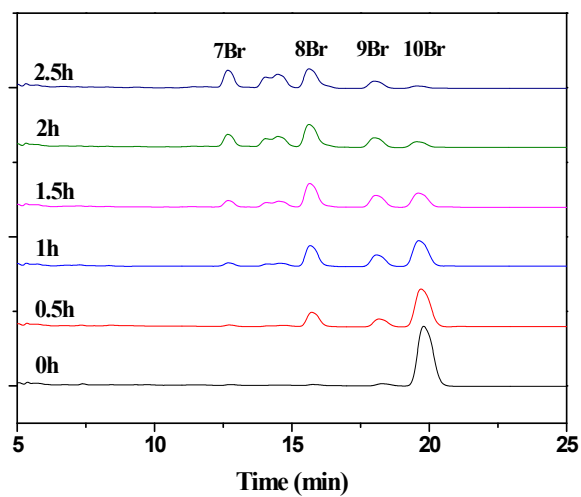


Fig. S3 HPLC chromatograms of degradation products of BDE209 with FeOCN-4 in different irradiation times.

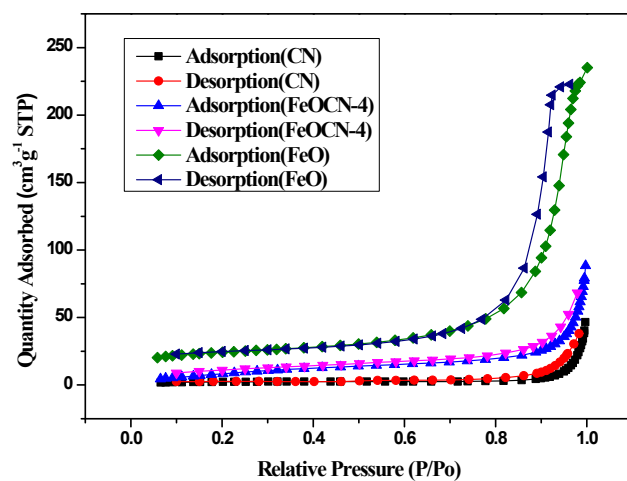


Fig. S4 Nitrogen adsorption isotherms of pure  $g\text{-C}_3\text{N}_4$  (CN),  $\text{Fe}_3\text{O}_4$  (FeO) and FeOCN-4.

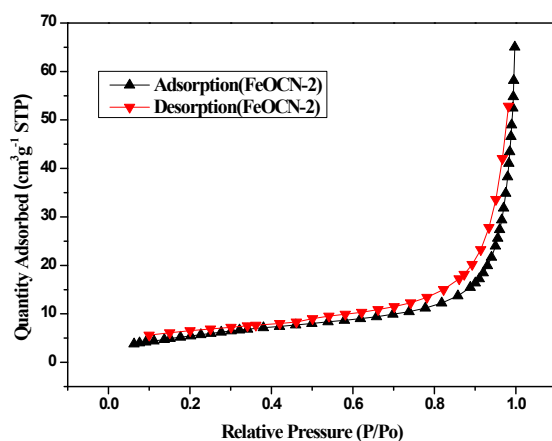


Fig. S5 Nitrogen adsorption isotherms of FeOCN-2.

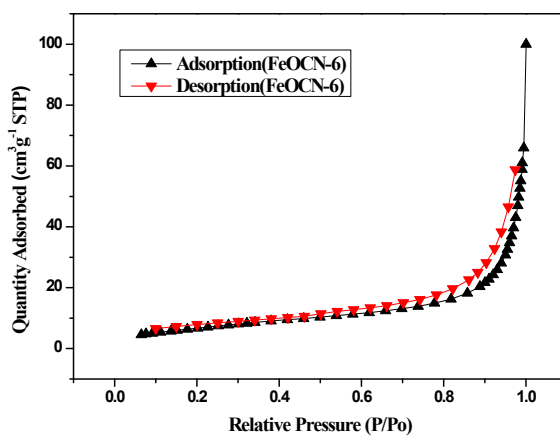


Fig. S6 Nitrogen adsorption isotherms of FeOCN-6.

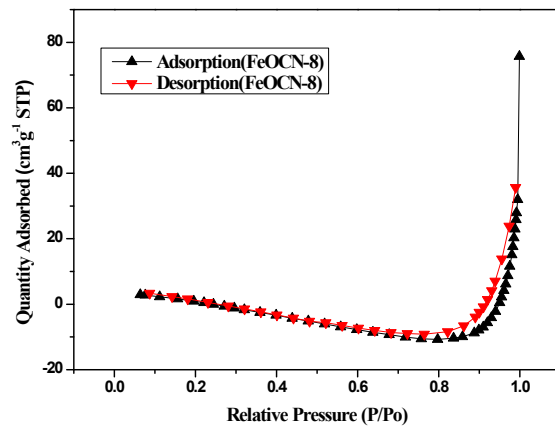


Fig. S7 Nitrogen adsorption isotherms of FeOCN-8.

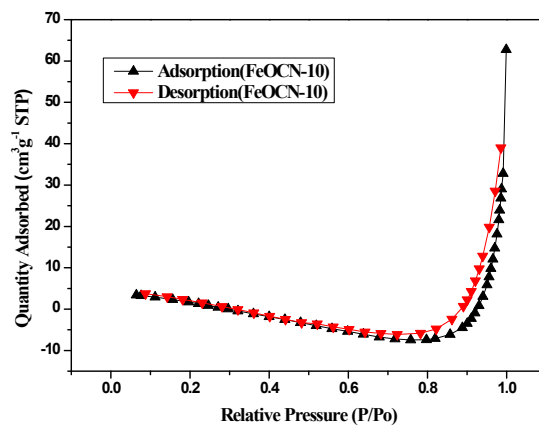


Fig. S8 Nitrogen adsorption isotherms of FeOCN-10.