

Electronic Supplementary Information

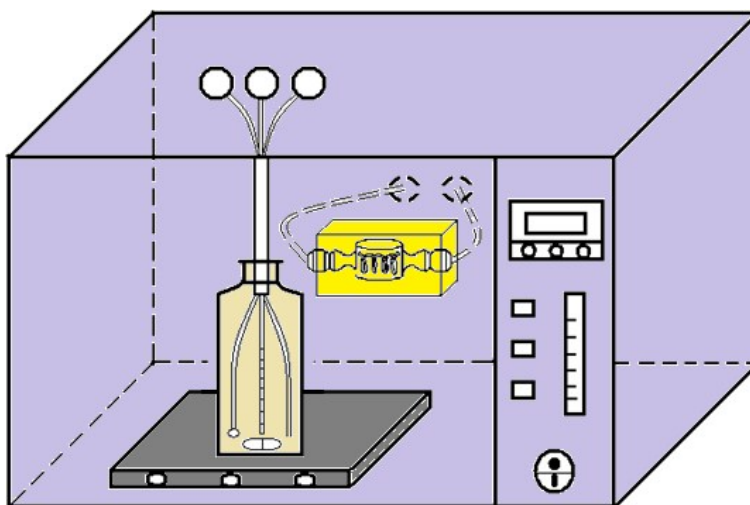


Fig. S1 The photocatalytic reactor.

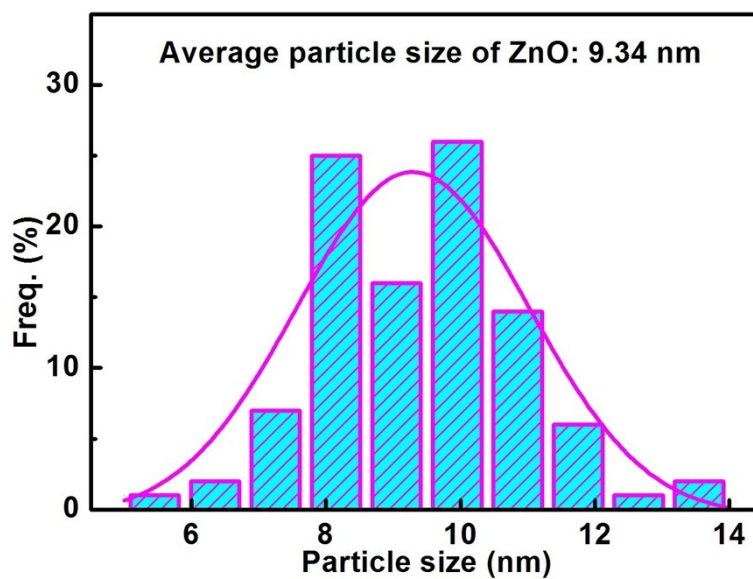


Fig. S2 The particle size distribution of ZnO in functional ZnO/C/Fe₃O₄.

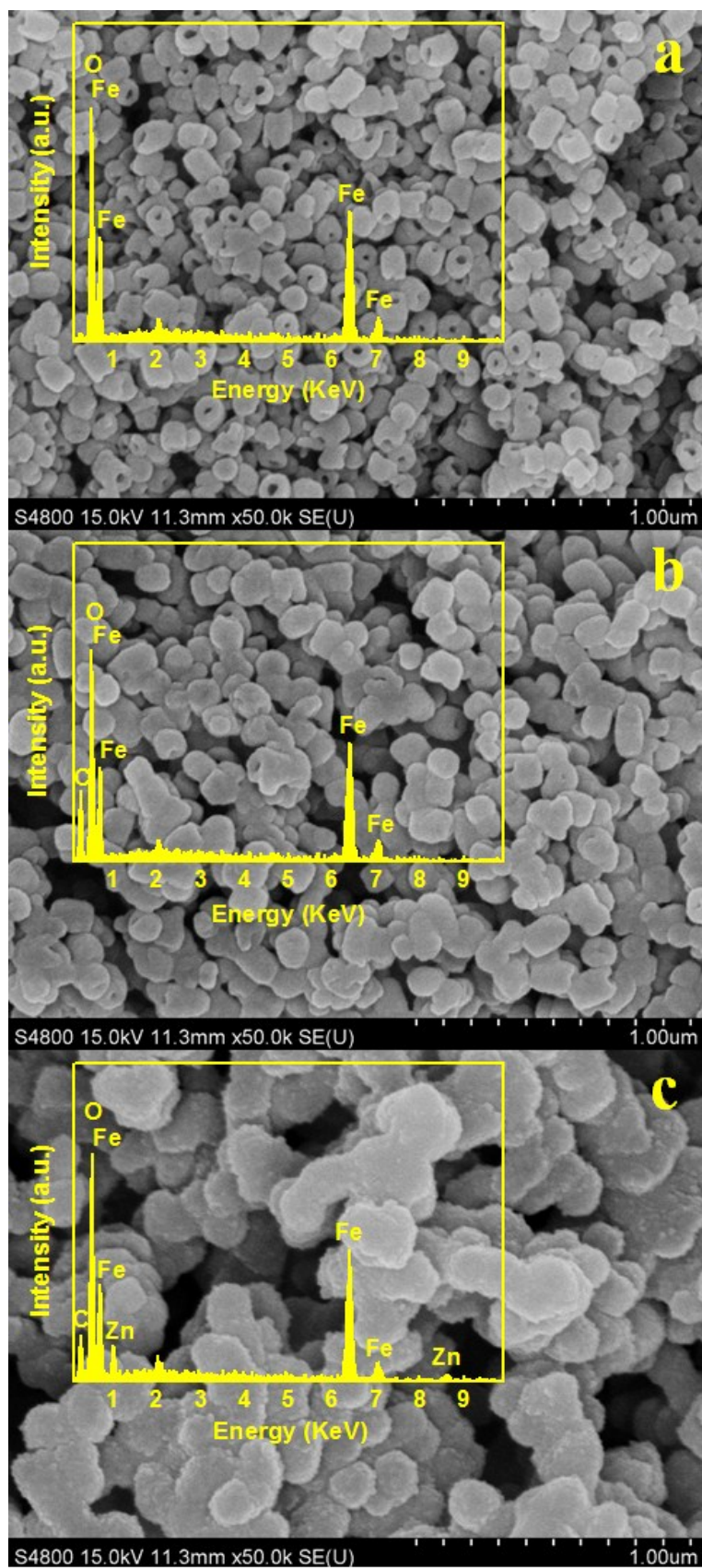


Fig. S3 SEM images and EDS spectra (inset) of Fe_3O_4 (a), $\text{C}/\text{Fe}_3\text{O}_4$ (b) and functional $\text{ZnO}/\text{C}/\text{Fe}_3\text{O}_4$ (c).

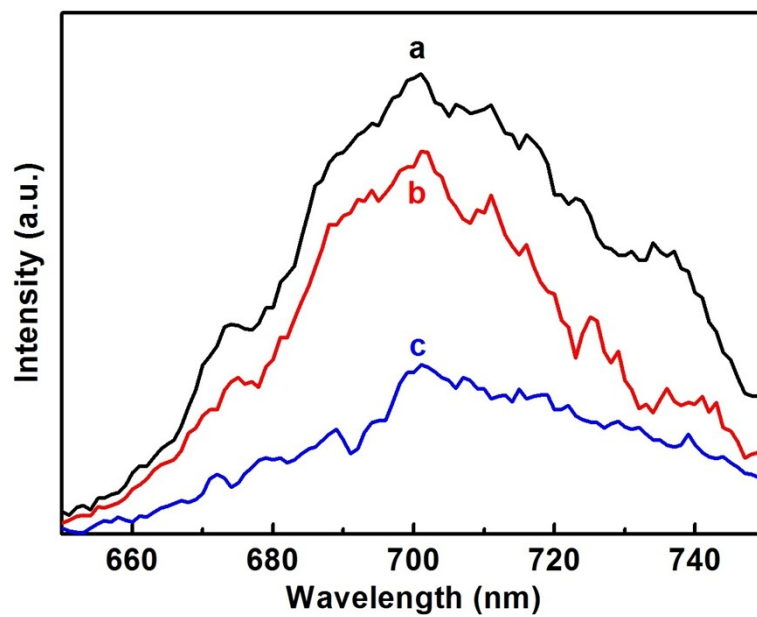


Fig. S4 PL spectra of ZnO (a), ZnO/Fe₃O₄ (b) and functional ZnO/C/Fe₃O₄ (c).

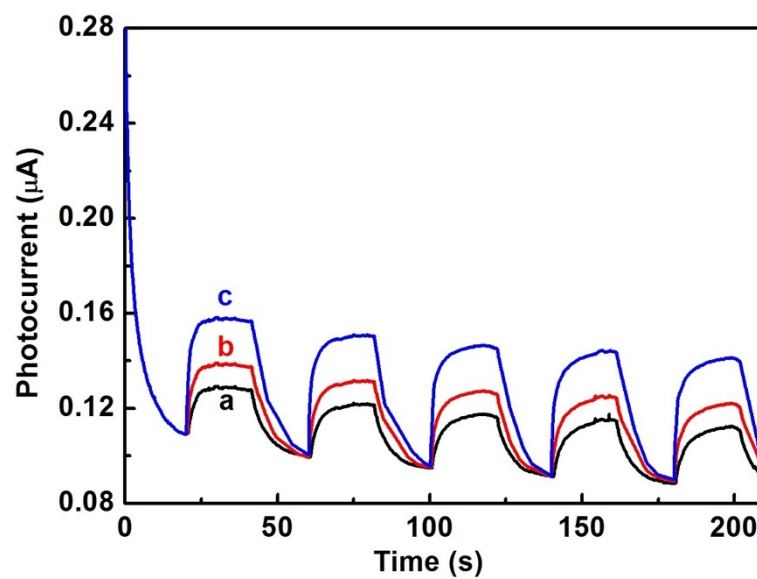
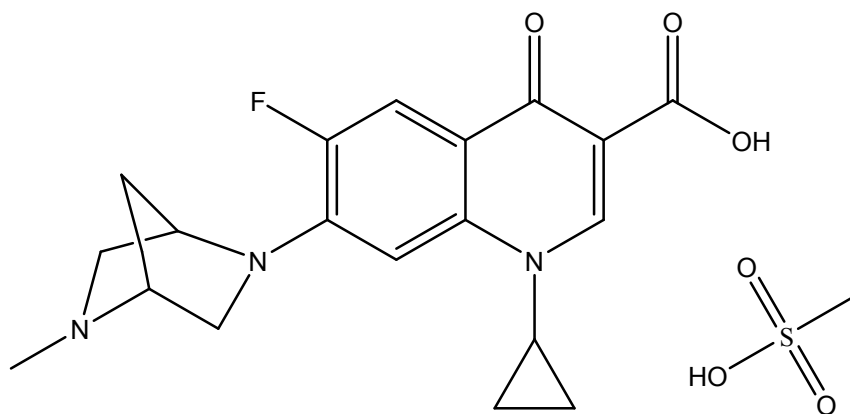
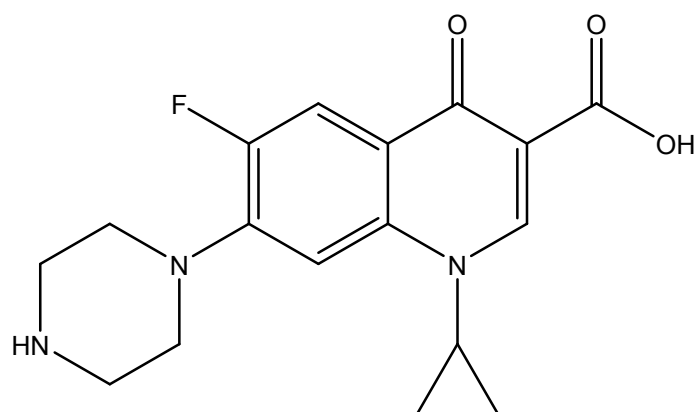


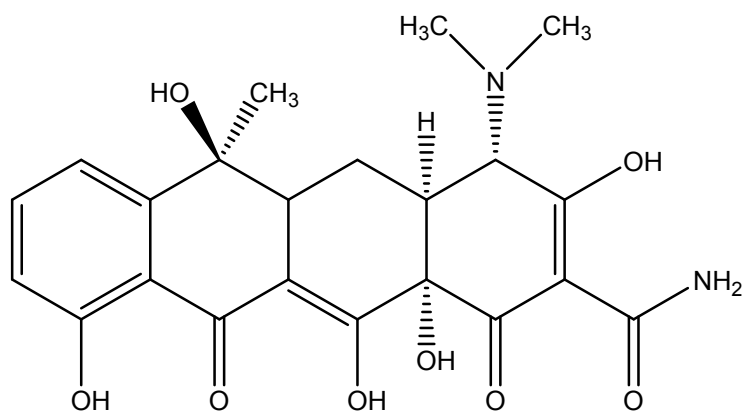
Fig. S5 Transient photocurrent response curves of ZnO (a), ZnO/Fe₃O₄ (b) and functional ZnO/C/Fe₃O₄ (c) under visible light irradiation.



Danofloxacin mesylate (DM)



Ciprofloxacin (CIP)



Tetracycline (TC)

Fig. S6 The molecular structures of danofloxacin mesylate, ciprofloxacin and tetracycline.

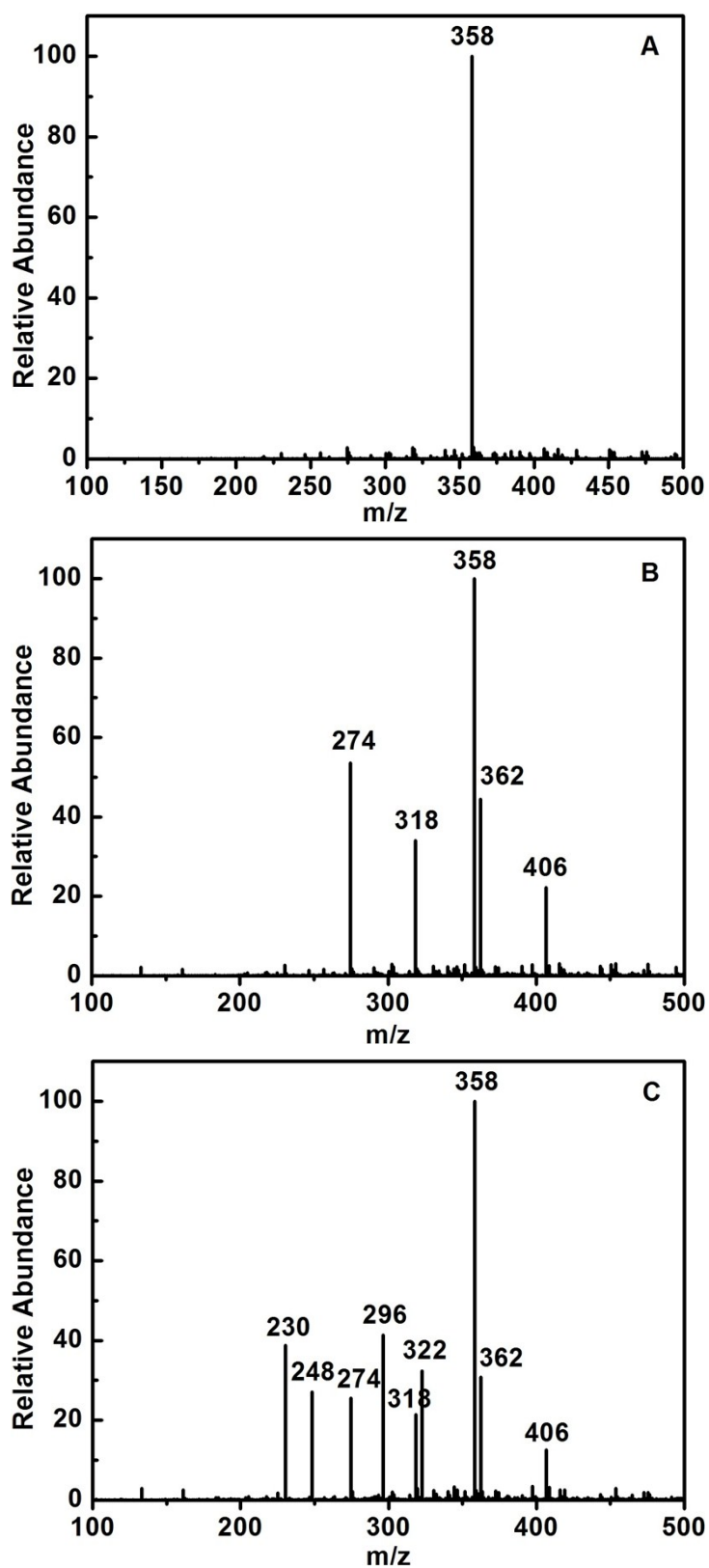


Fig. S7 m/z of degraded danofloxacin mesylate with functional ZnO/C/Fe₃O₄ (A. the initial danofloxacin mesylate aqueous solution, B. degradation of danofloxacin mesylate in 60 min, C. degradation of danofloxacin mesylate in 120 min)