## **Supporting information**

## Real-time monitoring of ciprofloxacin degradation in Electro-Fenton-like system using electrochemical-mass spectrometry

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\*Corresponding Author. E-mail: jiejiang@hitwh.edu.cn. E-mail: dreamerlina@163.com Figure S1. MS<sup>n</sup> mass spectra of *m/z* 279, 334, 306, 263 and 291.

Figure S2. MS<sup>2</sup> mass spectra of m/z 330 and 304.

Figure S3. MS<sup>2</sup> mass spectra of *m/z* 275, 277, 280, 293, 305 and 364.

Figure S4. Signal intensities of m/z 334, 291, 263, 279 and 280 obtained at different reaction times.

Figure S5. Potential mechanism of free radicals attack for CIP degradation in Electro-Fenton-like system.

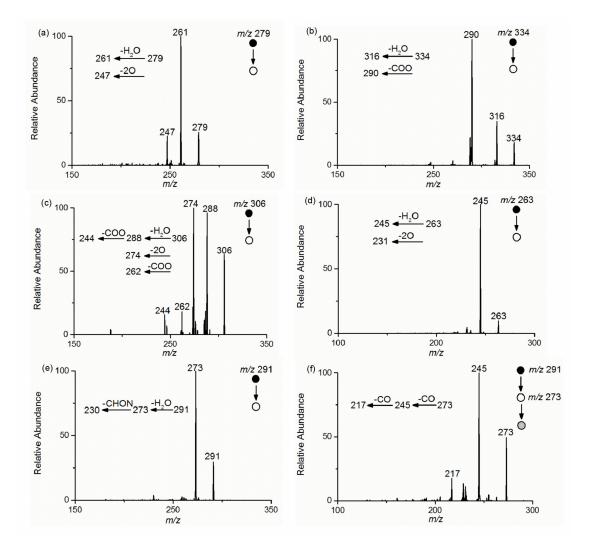


Figure S1. MS/MS mass spectra of (a) *m/z* 279, (b) 334, (c) 306, (d) 263 and (e) 291.

 $MS^3$  mass spectrum of (f) m/z 273.

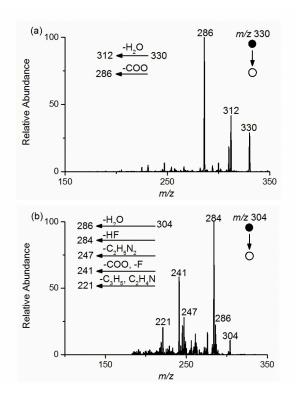


Figure S2. MS/MS mass spectra of (a) m/z 330 and (b) 304.

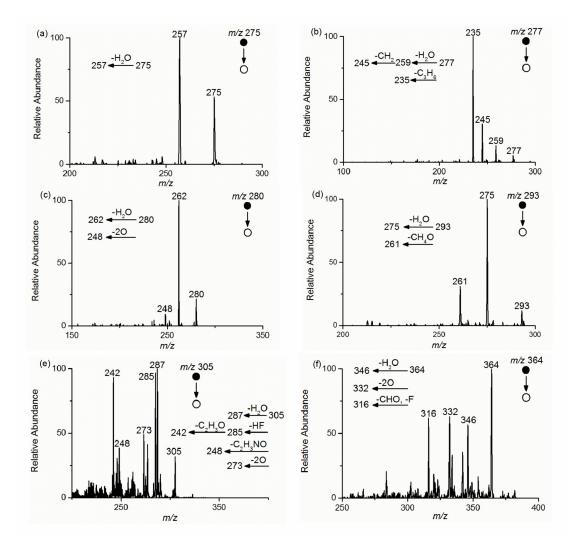
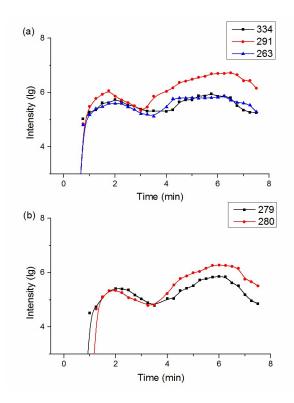
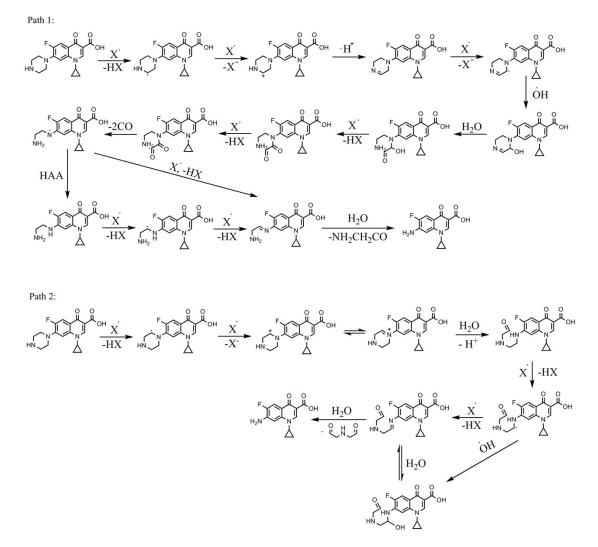


Figure S3. MS/MS mass spectra of (a) *m/z* 275, (b) 277, (c) 280, (d) 293, (e) 305 and

(f) 364.



**Figure S4.** Signal intensities of (a) m/z 334, 291, 263; and (b) m/z 279, 280 obtained at different reaction times. The concentrations of CIP, Fe<sup>2+</sup> and S<sub>2</sub>O<sub>8</sub><sup>2-</sup> were 5 × 10<sup>-5</sup> mol/L, 3 × 10<sup>-3</sup> mol/L and 3 × 10<sup>-3</sup> mol/L, respectively. The total volume of reaction solution was 100 µL, and the proportion of methanol/water was 9:1. The  $\Delta V$  was 20 V.



**Figure S5.** Potential mechanism of free radicals attack for CIP degradation in Electro-Fenton-like system.