

1 **Supplementary Material**

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3 **Au nanoparticles sensitized blue TiO<sub>2</sub> nanorod arrays for efficient**

4 **Gatifloxacin photodegradation**

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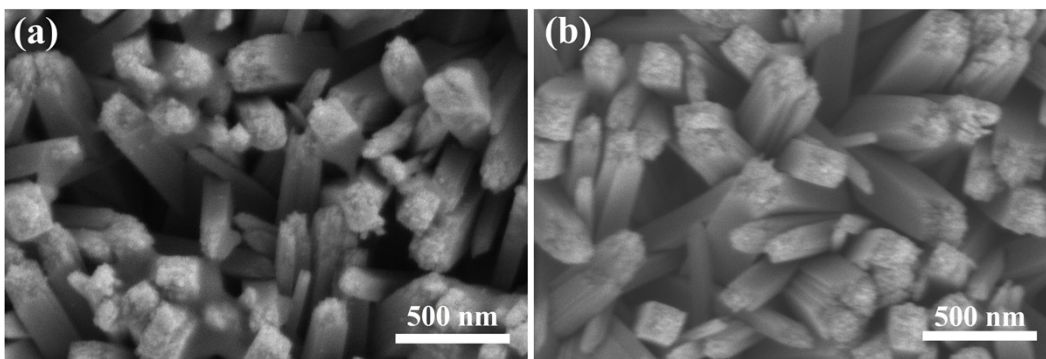
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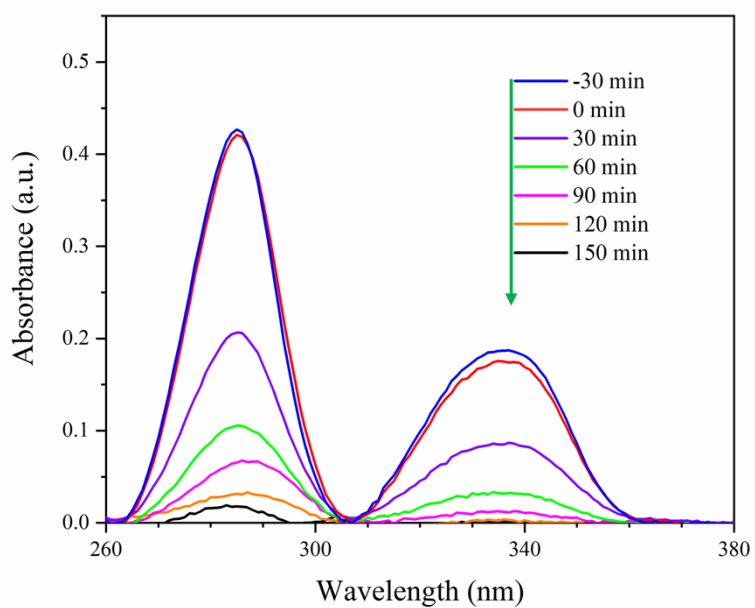


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Fig. S1. SEM images of TiO<sub>2</sub> (a) and B-TiO<sub>2</sub> (b).



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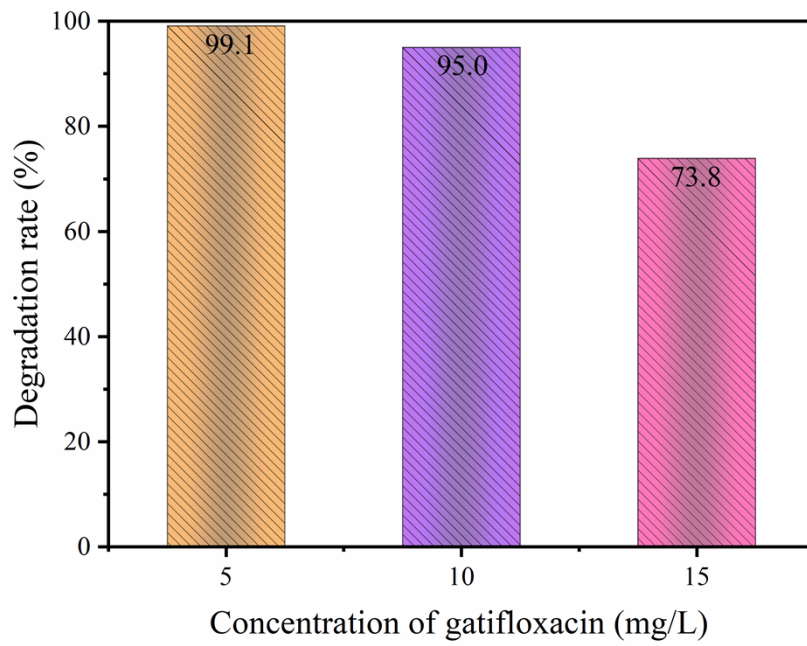
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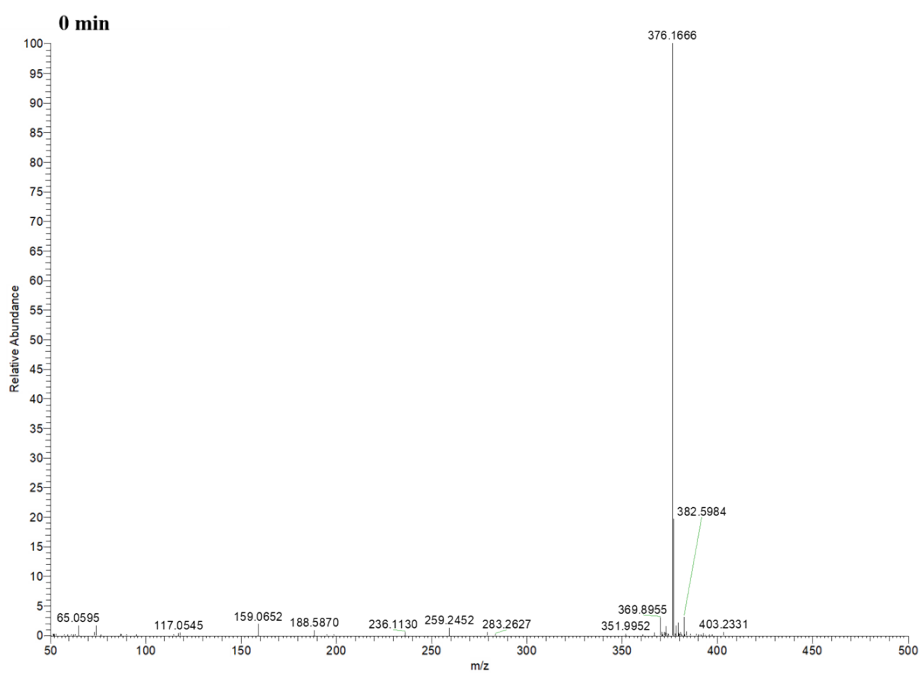
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Fig. S2. UV-vis spectra of Gatifloxacin by Au/B-TiO<sub>2</sub>-2 at various time.



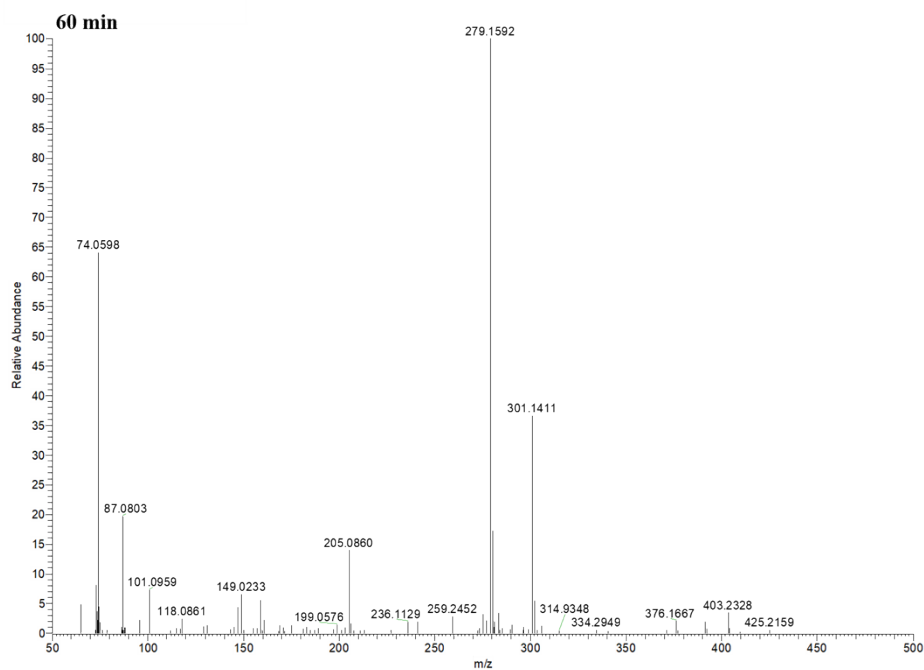
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Fig. S3. Comparison of removal rates of Gatifloxacin at different concentrations by Au/B-TiO<sub>2</sub>-2.



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Fig. S4. MS spectra of Gatifloxacin at 0 min over Au/B-TiO<sub>2</sub>-2.



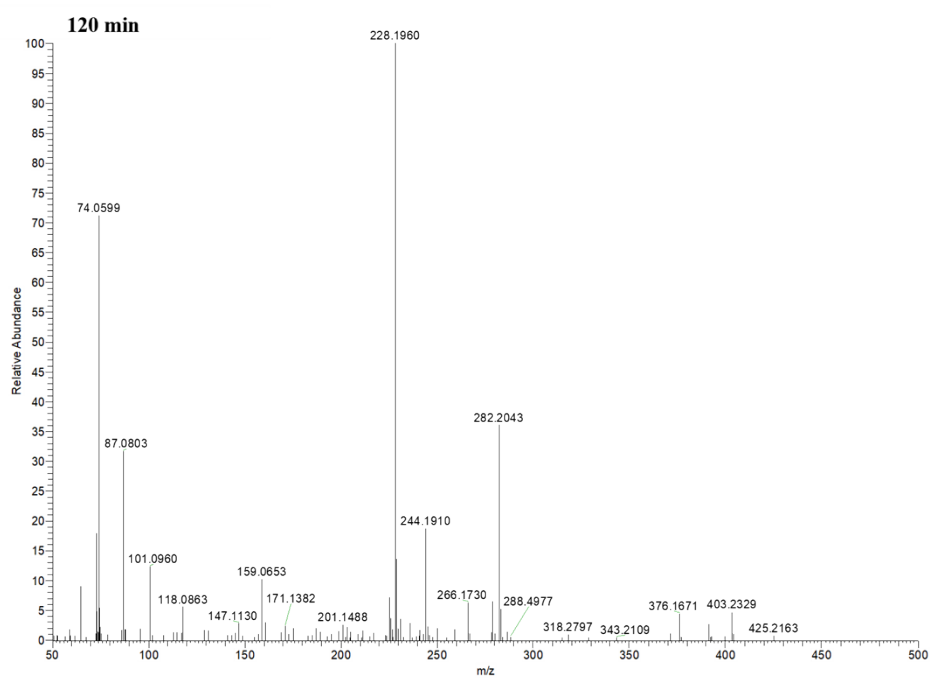
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**Fig. S5.** MS spectra of Gatifloxacin at 60 min over Au/B-TiO<sub>2</sub>-2.

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**Fig. S6.** MS spectra of Gatifloxacin at 120 min over Au/B-TiO<sub>2</sub>-2.

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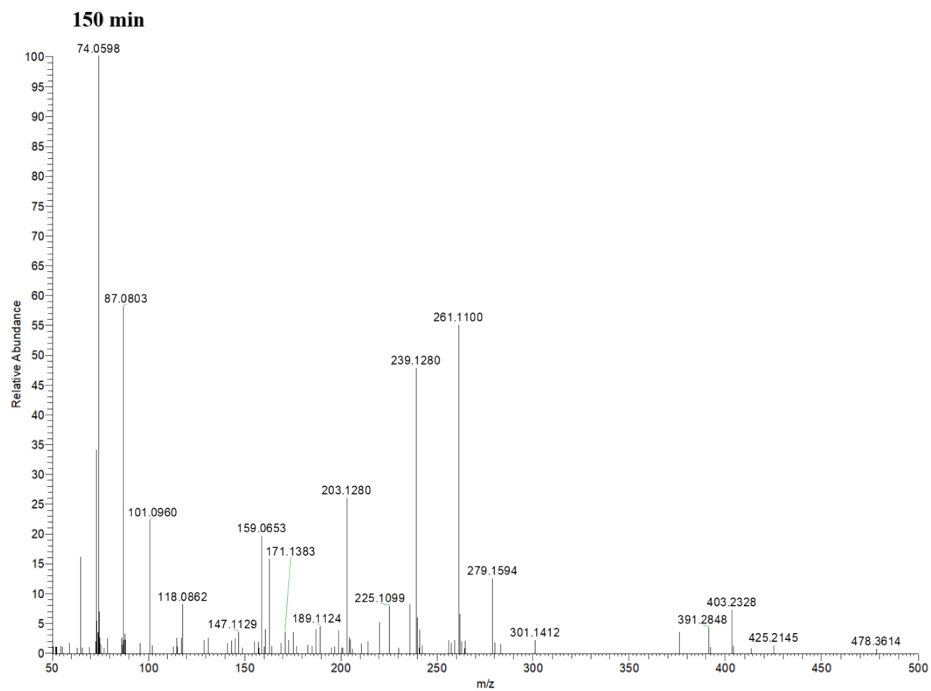


Fig. S7. MS spectra of Gatifloxacin at 150 min over Au/B-TiO<sub>2</sub>-2.

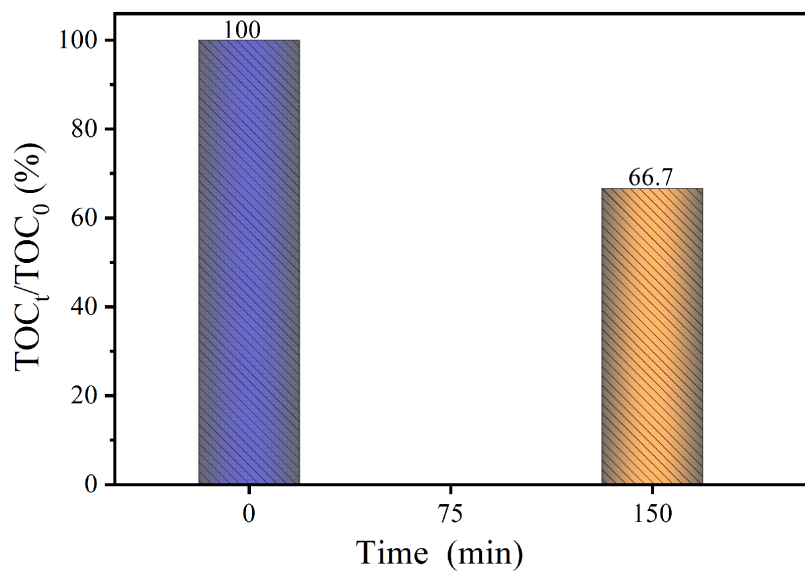
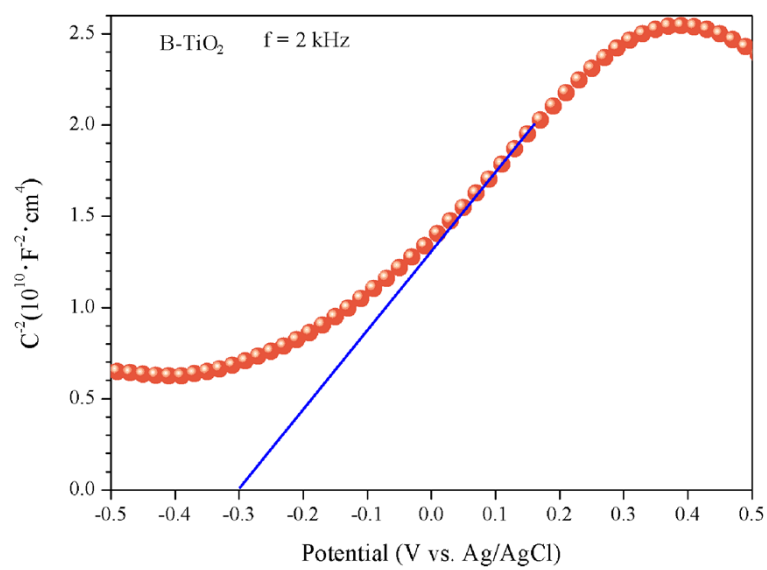


Fig. S8. Mineralization of Gatifloxacin by Au/B-TiO<sub>2</sub>-2.

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**Fig. S9.** Mott-Schottky plots of B-TiO<sub>2</sub>.