

## Supporting information

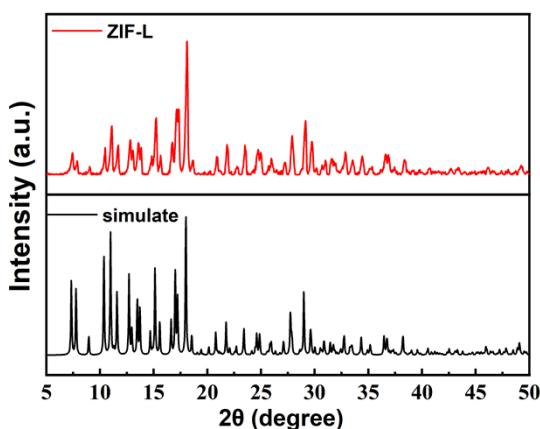


Figure S1. The XRD patterns of ZIF-L.

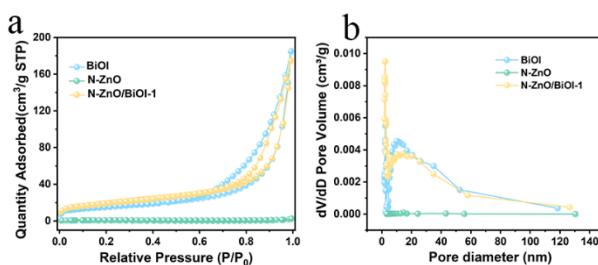


Figure S2 (a)  $N_2$  adsorption-desorption isotherms. (b) The pore size distribution curves of as-synthesized products

Table S1: Physicochemical parameters of different samples

Sample	Surface area ( $m^2 \cdot g^{-1}$ )	Pore volume ( $cm^3 \cdot g^{-1}$ )	Pore diameter (nm)
BiOI	55.648	0.287	19.984
N-ZnO	1.656	0.003	8.268
N-ZnO/BiOI -1	69.156	0.266	17.850

	N-ZnO	N-ZnO	N-ZnO	
BiOI	N-ZnO	/BiOI-1	/BiOI-2	/BiOI-3
K (min <sup>-1</sup> )	0.00235	0.00268	0.00769	0.00301
R <sup>2</sup>	0.9178	0.9151	0.9482	0.8091
				0.008091

Table S2: The different K of the Photocatalyst.

R<sup>2</sup> 0.9178 0.9151 0.9482 0.8091 0.008091

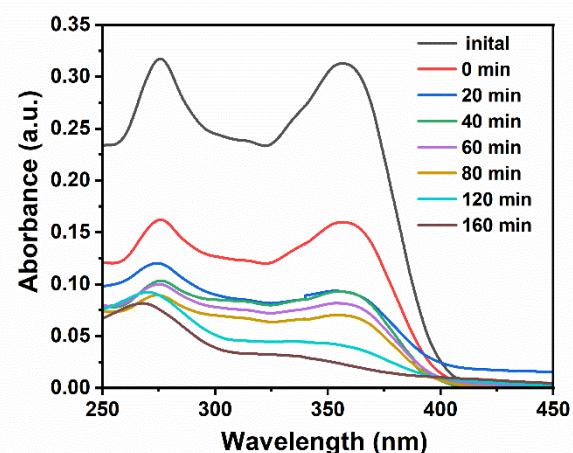


Figure S4: The UV-VIS absorption spectra of TCH after photocatalytic degradation.

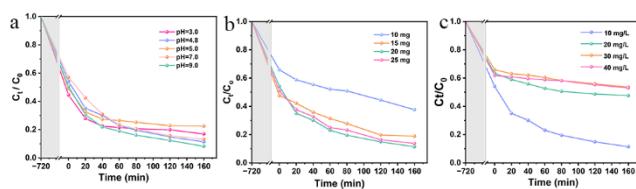


Figure S3. (a) The effect of pH. (b) The dosage of catalyst. (c) TCH concentration.