

## Electronic Supplementary Material

### Photosensitive metal–organic framework having a flower-like structure for effective visible light–driven photodegradation of rhodamine B

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**Figure S2.** EDS point scan of flower-like Cu-TCPP.

**Figure S3.** Thermogravimetric curve of flower-like Cu-TCPP.

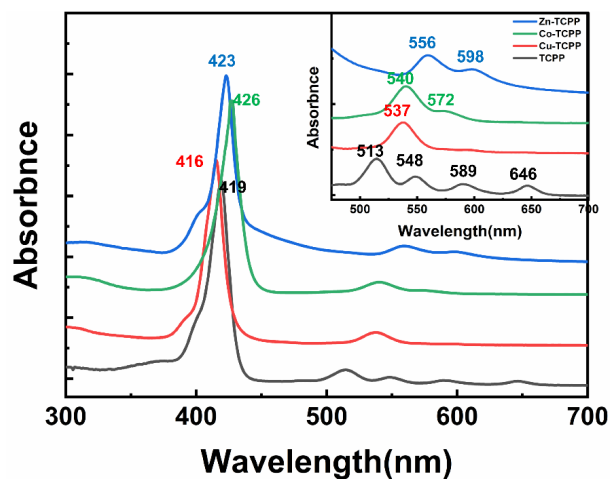
**Figure S4.** XRD spectra (a) and infrared spectra (b) of flower-like Cu-TCPP before and after the photocatalytic experiments.

**Figure S5.** SEM images of flower-like Cu-TCPP before and after the photocatalytic reaction.

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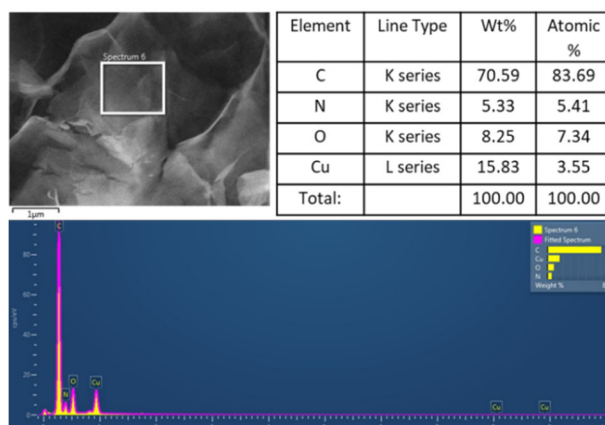
**Figure S7.** UV–vis DRS spectra of flower-like Cu-TCPP; (b) Tauc plot of the UV-vis DRS spectrum of flower-like Cu-TCPP.

**Figure S8.** VB XPS diagram of flower-like Cu-TCPP.

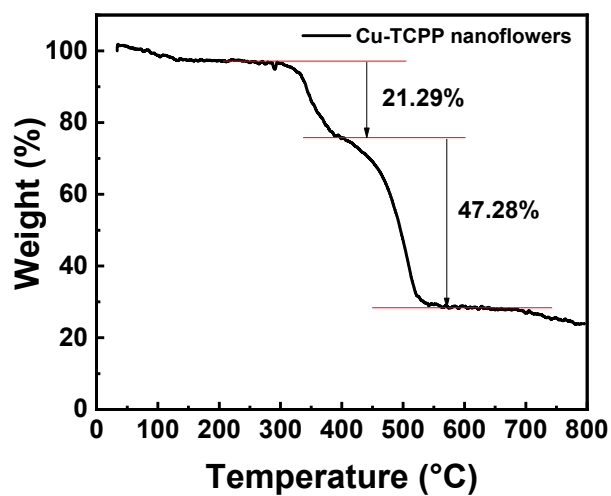


**Figure S1.** UV-vis spectra of TCPP and flower-like M-TCPP (M=Cu, Zn, Co).

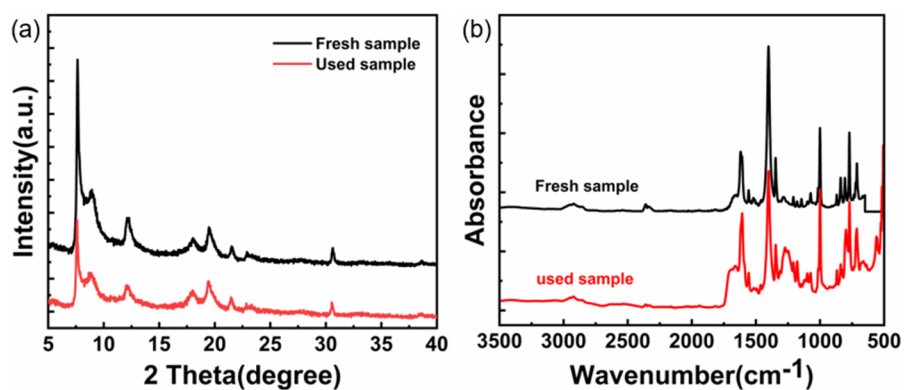
(Added 10  $\mu$ L of TFA) .



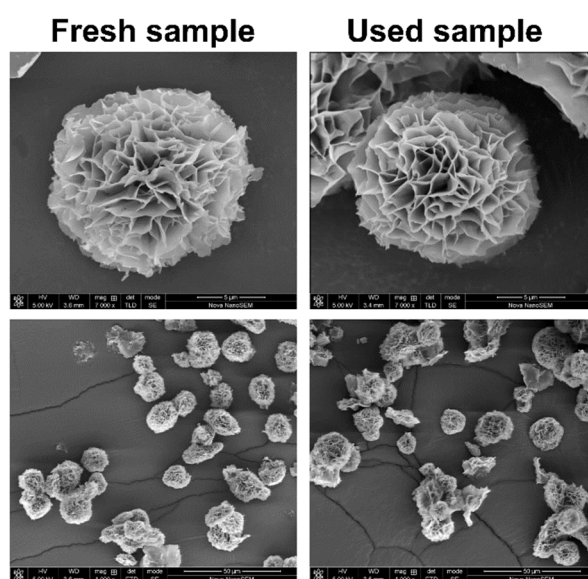
**Figure S2.** EDS point scan of flower-like Cu-TCPP.



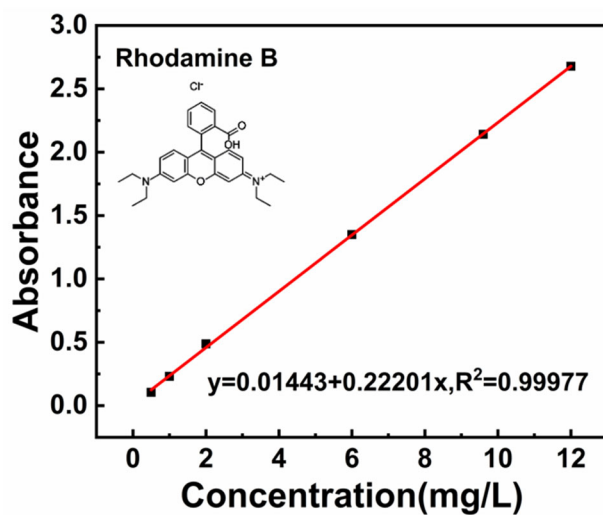
**Figure S3.** Thermogravimetric curve of flower-like Cu-TCPP.



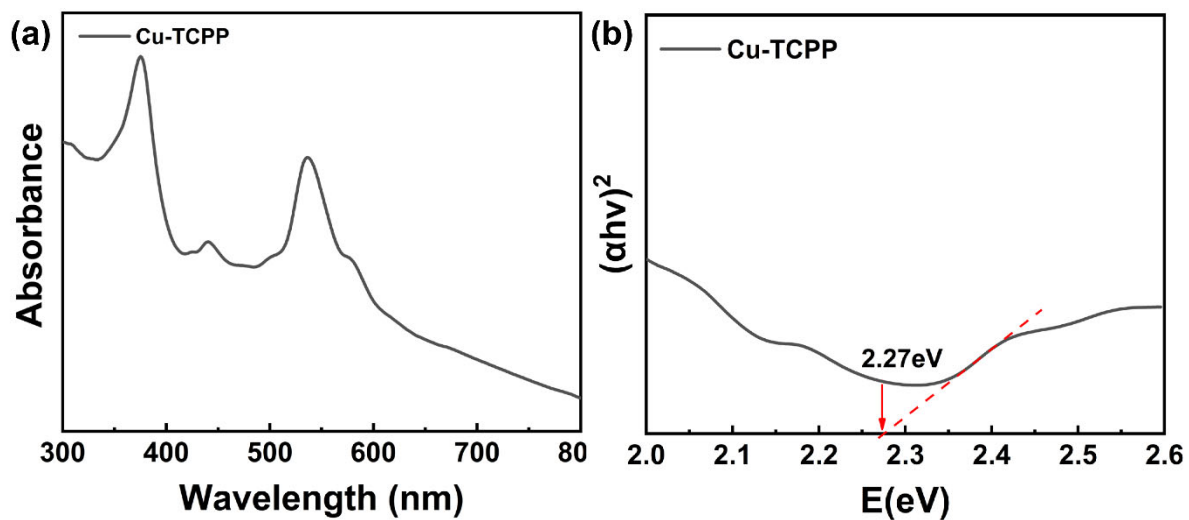
**Figure S4.** XRD spectra (a) and infrared spectra (b) of Cu-TCPP nanoflowers before and after the photocatalytic experiments. Experimental conditions: RhB, 10 mg L<sup>-1</sup>; flower-like Cu-TCPP, 0.1 g L<sup>-1</sup>; initial pH 11.



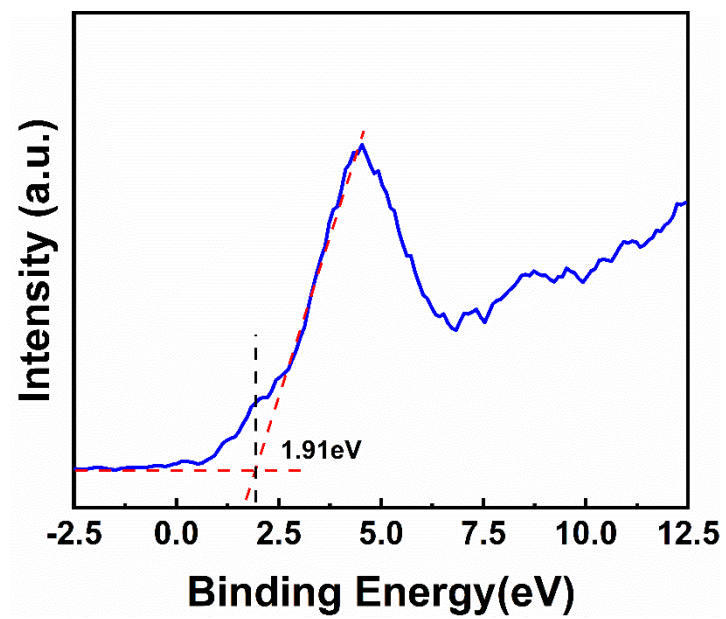
**Figure S5.** SEM images of flower-like Cu-TCPP before and after the photocatalytic reaction. Experimental conditions: RhB, 10 mg L<sup>-1</sup>; flower-like Cu-TCPP, 0.1 g L<sup>-1</sup>; initial pH 11.



**Figure S6.** Structure and standard curve of Rhodamine B.



**Figure S7.** (a) UV-vis DRS spectra of flower-like Cu-TCPP; (b) Tauc plot of the UV-vis DRS spectrum of flower-like Cu-TCPP.



**Figure S8.** VB XPS diagram of flower-like Cu-TCPP.