

## Electronic supplementary information (ESI)

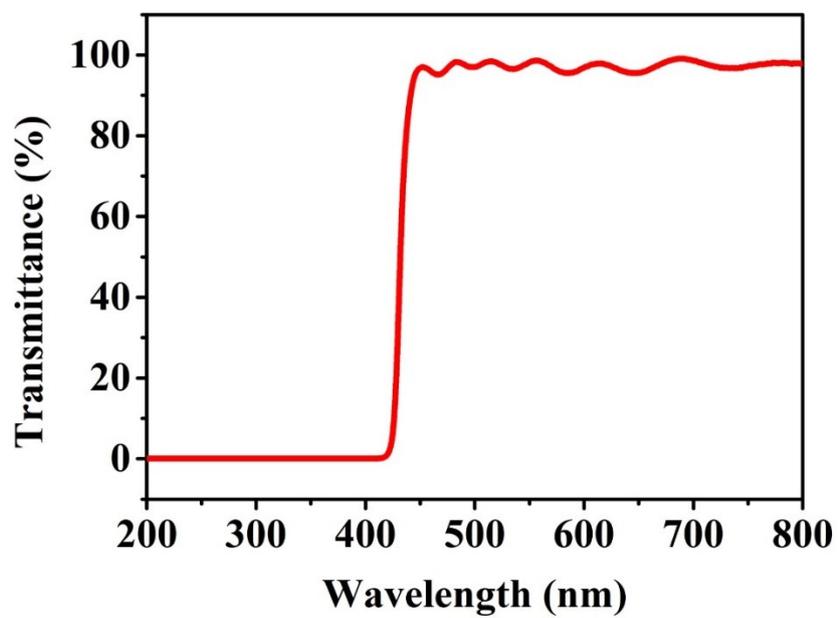
### **In-situ growth of CuS nanoparticles on g-C<sub>3</sub>N<sub>4</sub> nanosheets for H<sub>2</sub> production and the degradation of organic pollutant under visible-light irradiation**

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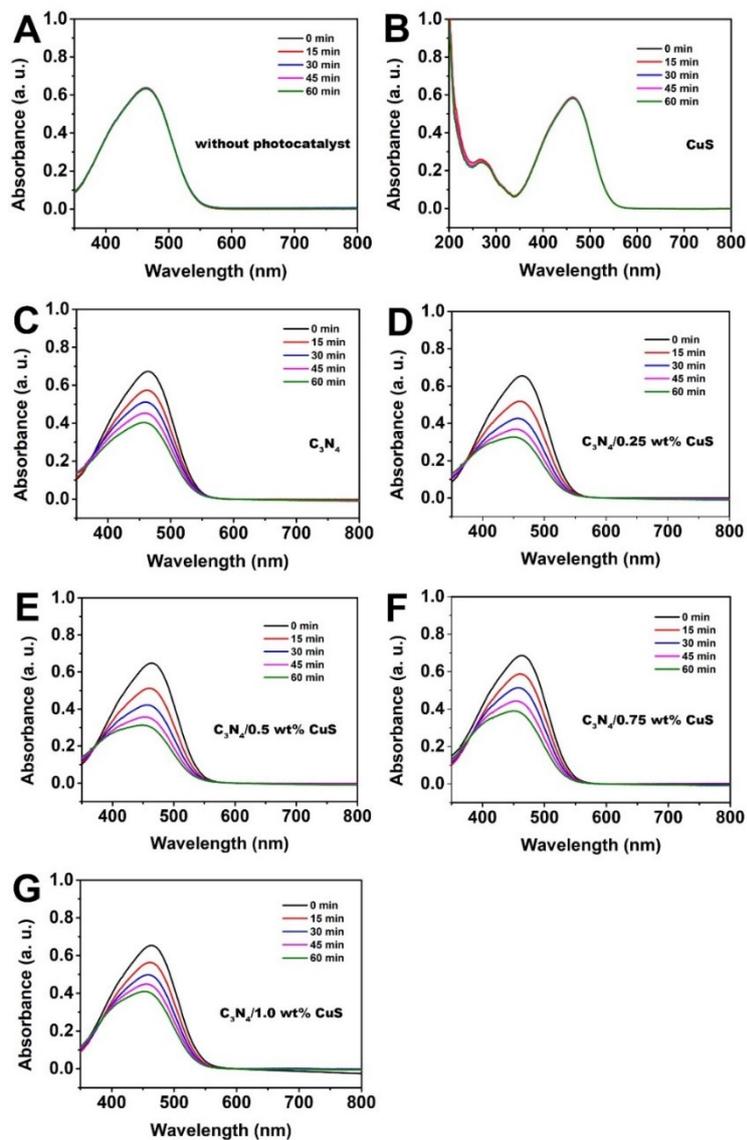
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**Fig. S1** Transmission spectra of a 420 nm cut-off filter used for photocatalytic measurements.



**Fig. S2** UV-vis absorption spectra of MO solution separated from the suspensions containing (A) without photocatalyst, (B) CuS, (C) C<sub>3</sub>N<sub>4</sub>, (D) C<sub>3</sub>N<sub>4</sub>/0.25 wt% CuS, (E) C<sub>3</sub>N<sub>4</sub>/0.5 wt% CuS, (F) C<sub>3</sub>N<sub>4</sub>/0.75 wt% CuS, and (G) C<sub>3</sub>N<sub>4</sub>/1.0 wt% CuS.