

**Supporting Information**

**Synthesis of Photocatalytic Cysteine- Capped Cu<sub>10</sub> Clusters in  
Water Using Small Cu<sub>5</sub> Clusters as Catalysts**

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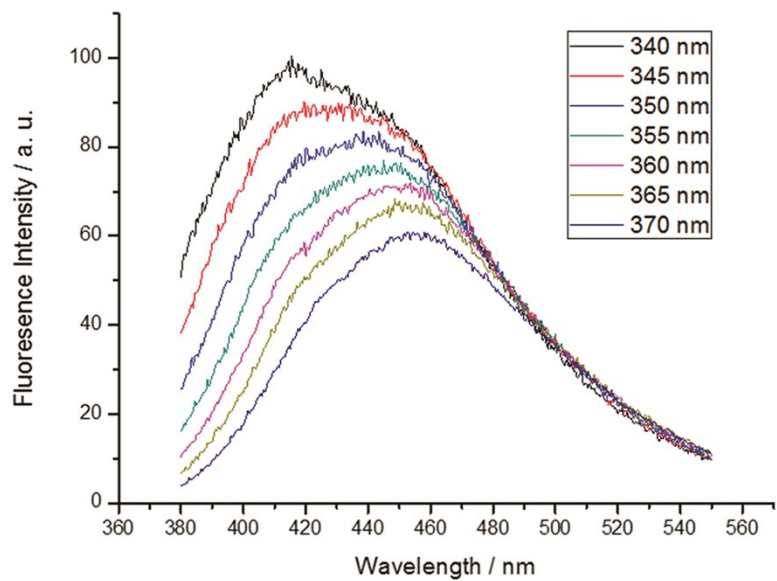


Fig. S 1: Excitation dependent emission (EDE) for a sample of Cu-Cys clusters in water under different excitation wavelengths, from 340 to 370 nm.

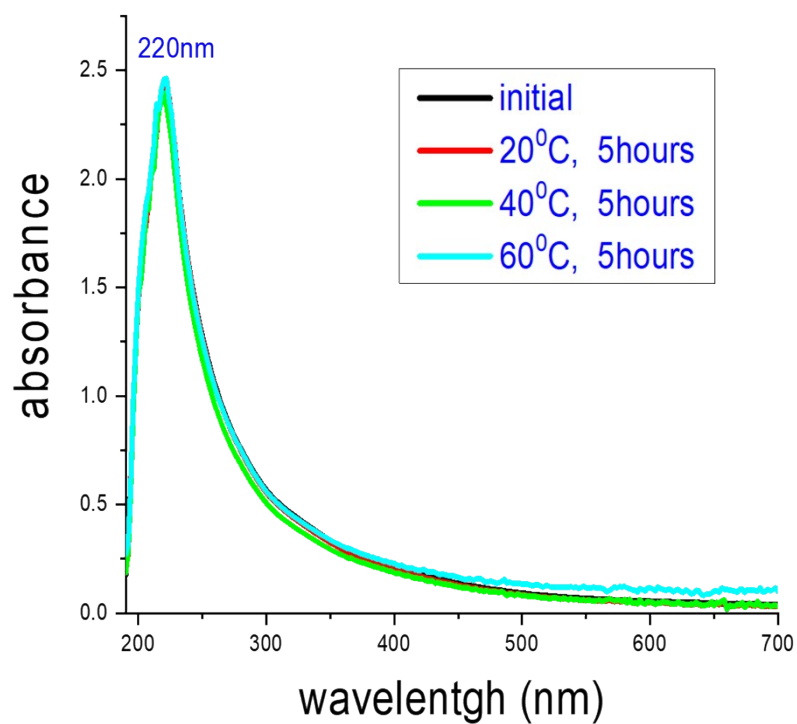


Fig. S 2: UV-vis spectra of a sample of Cu-Cys clusters at different temperatures

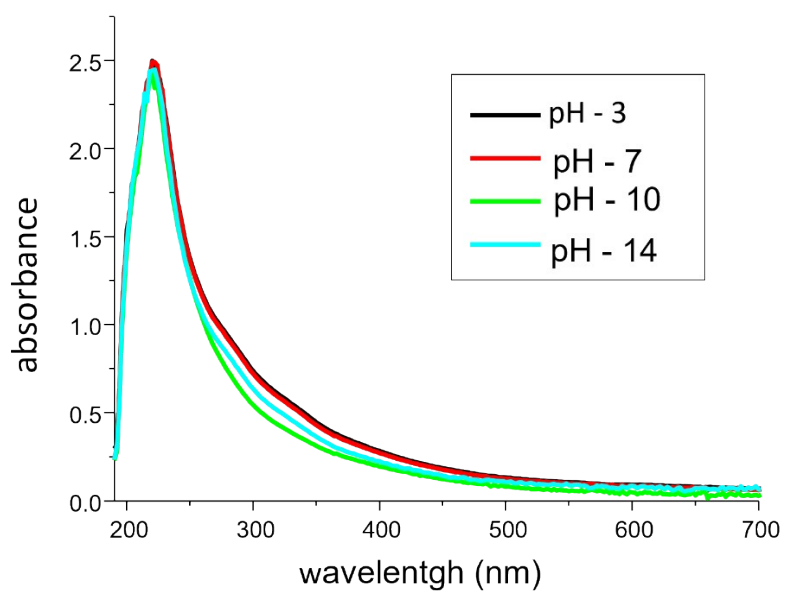


Fig. S 3: UV-Vis spectra of a sample of Cu-Cys clusters in water at different pHs

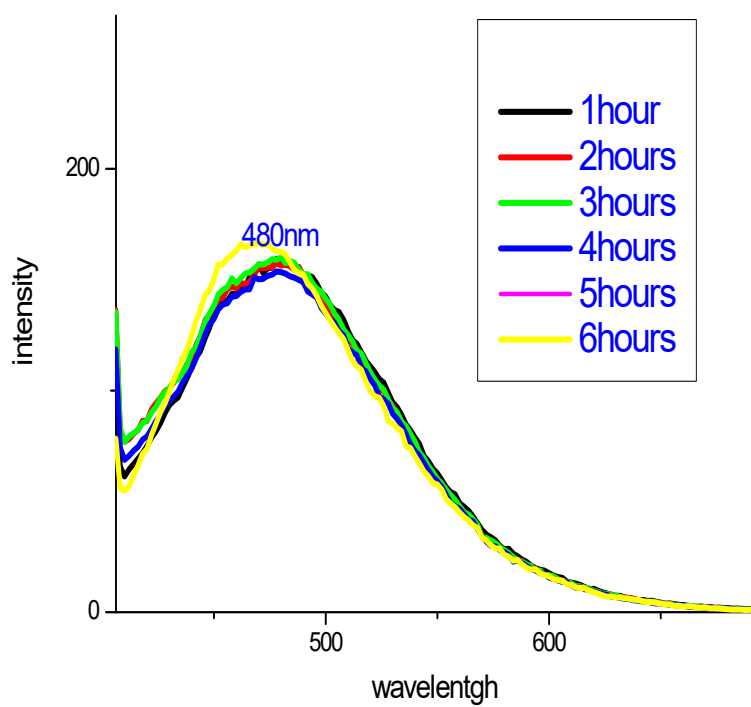


Fig. S 4: Photobleaching stability of a sample of Cu-cys clusters in water

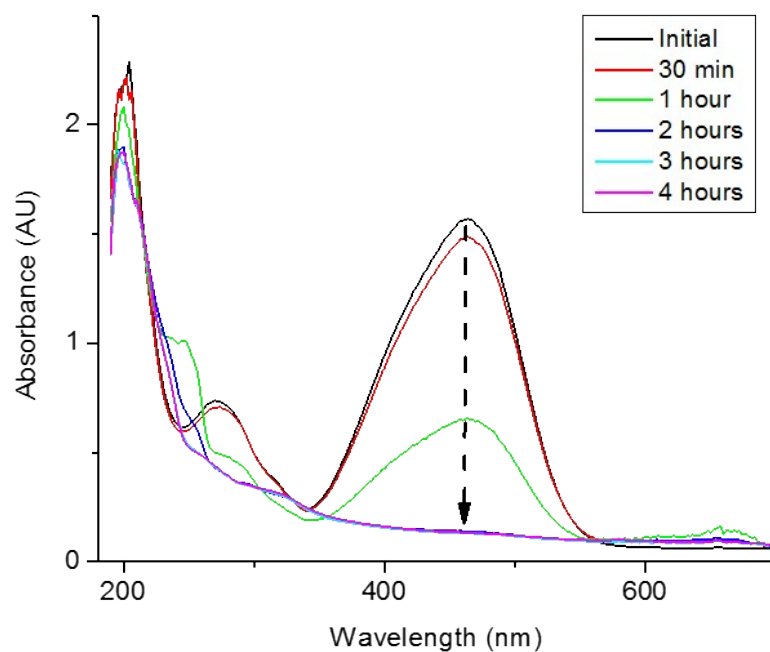


Fig. S 5: Change in the MO UV-Vis absorption spectrum after irradiation with visible light during four hours in the presence of Cu-cys clusters

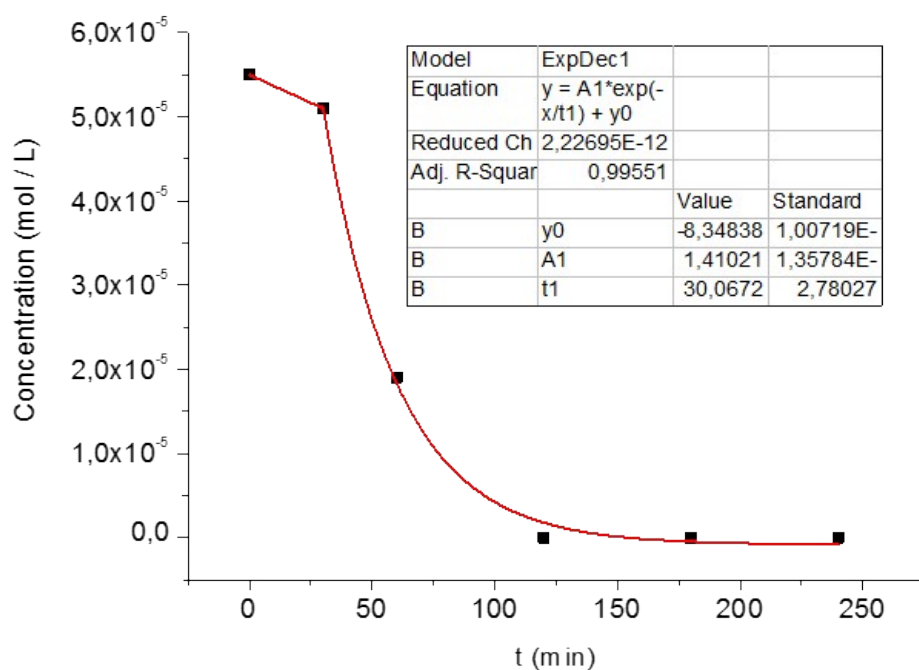


Fig. S 6: Removal rate for the photodegradation of MO after irradiation with visible light in the presence of Cu-cys clusters.  $[MO]_{initial} = 5.5 \times 10^{-5} M$ . Inset: statistical parameters. Note that at first the photodegradation is slower and one can consider that the reaction as such begins after the first 30 min. This is ascribed to an initial induction period where the MO molecules are adsorbed on the surface of the clusters.