

**Electronic Supporting Information**

**Photoreduction Obtained MoS<sub>2</sub>/CQDs for Assembly of Ternary MoS<sub>2</sub>/CQDs/ZnIn<sub>2</sub>S<sub>4</sub> Nanocomposite for Efficient Photocatalytic Hydrogen Evolution under Visible Light**

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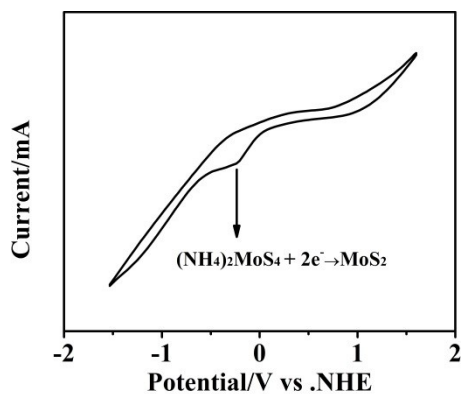
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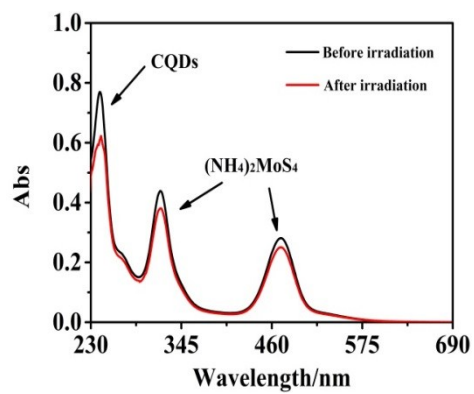
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**Fig. S1** CV of  $(\text{NH}_4)_2\text{MoS}_4$ .

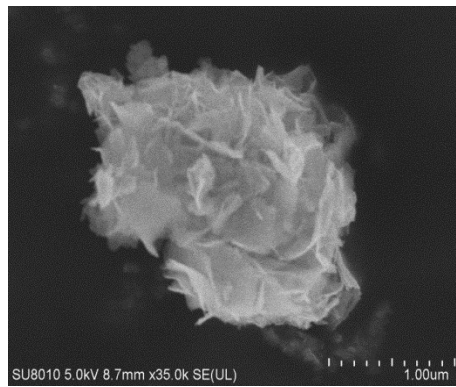


Cyclic Voltammetry curve of  $(\text{NH}_4)_2\text{MoS}_4$  was measured on an electrochemical analyzer (Zahner, Germany) in a standard three-electrode system using the glassy carbon electrode as the working electrodes, Pt wire as the counter electrode, and Ag/AgCl (saturated KCl) as a reference electrode.

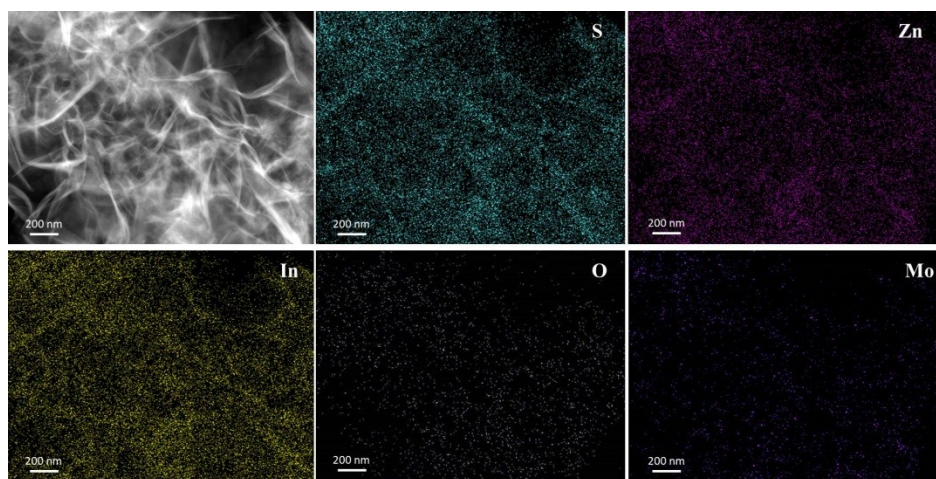
**Fig. S2** UV–vis spectra of the precursor solution containing CQDs and  $(\text{NH}_4)_2\text{MoS}_4$  before and after irradiation.



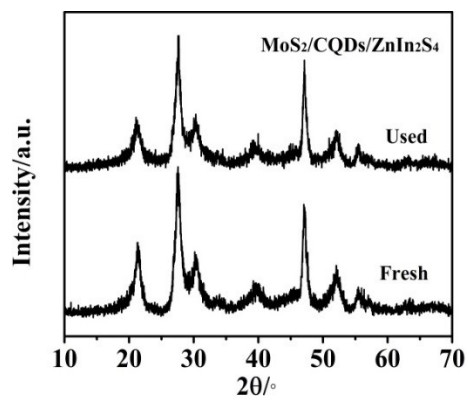
**Fig. S3** SEM image of bare  $\text{ZnIn}_2\text{S}_4$



**Fig. S4** Element mapping images of 3.0 wt% MoS<sub>2</sub>/CQDs/ZnIn<sub>2</sub>S<sub>4</sub> nanocomposite.



**Fig. S5** XRD patterns of 3.0 wt% MoS<sub>2</sub>/CQDs/ZnIn<sub>2</sub>S<sub>4</sub> nanocomposite before and after photocatalytic reaction.



**Fig. S6** XPS spectra of 3.0 wt% MoS<sub>2</sub>/CQDs/ZnIn<sub>2</sub>S<sub>4</sub> nanocomposite in C 1s, O 1s and Mo 3d after photocatalytic reaction.

