

Supporting Information For:

AgIn_xGa_{1-x}S₂ solid solution nanocrystals: synthesis, band gap tuning and photocatalytic activity

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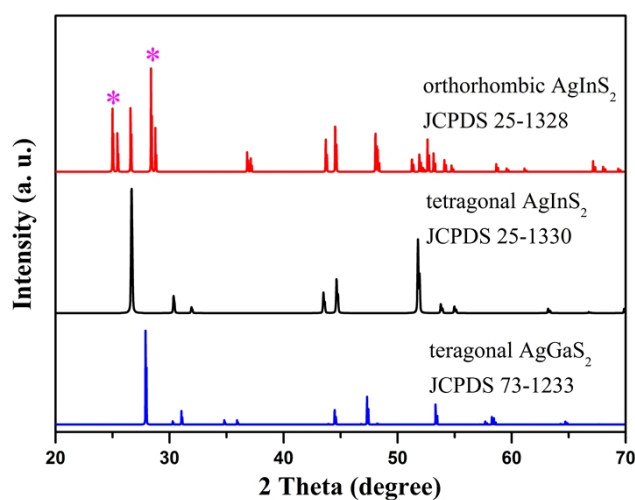


Fig. S1 XRD patterns of orthorhombic AgInS₂, tetragonal AgInS₂ and AgGaS₂.

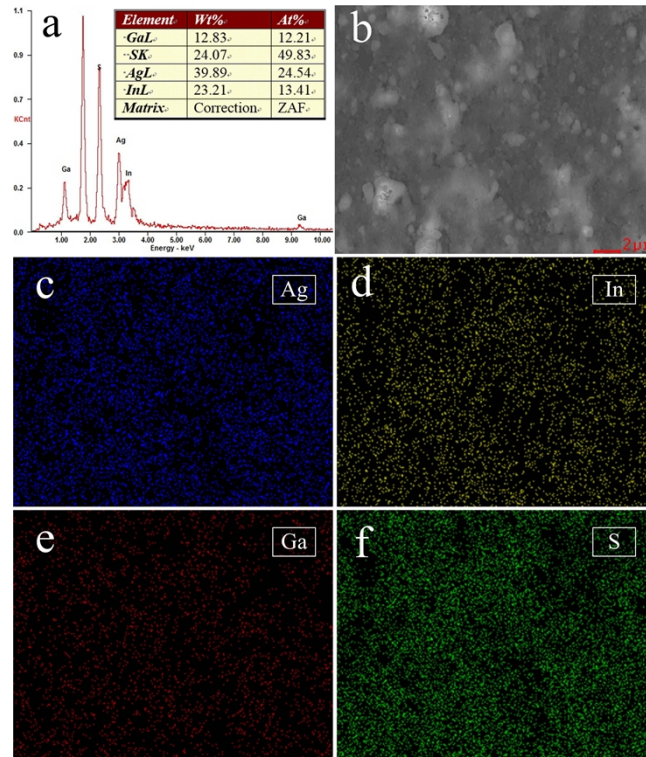


Fig. S2 EDX spectra and elemental distribution maps for Ag, In, Ga and S of the as-prepared $\text{AgIn}_{0.5}\text{Ga}_{0.5}\text{S}_2$ solid solutions.

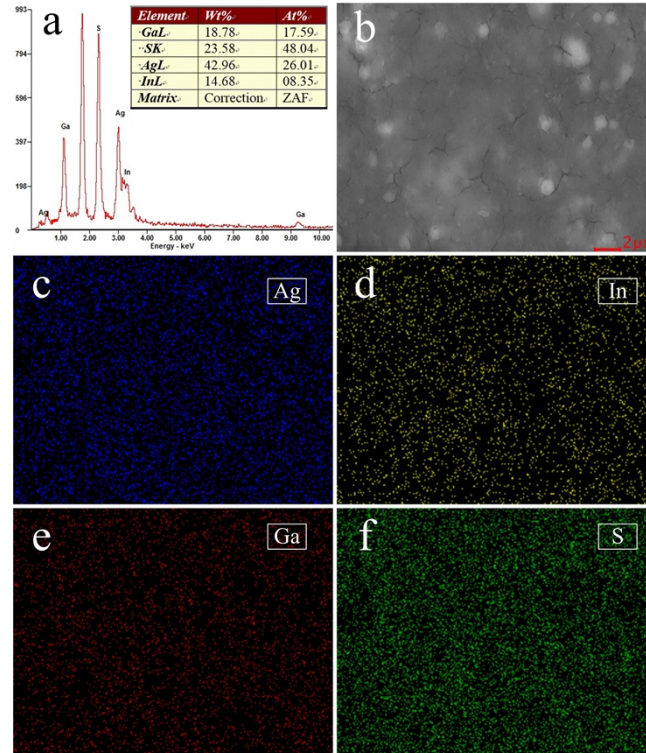


Fig. S3 EDX spectra and elemental distribution maps for Ag, In, Ga and S of the as-prepared $\text{AgIn}_{x0.3}\text{Ga}_{0.7}\text{S}_2$ solid solution.

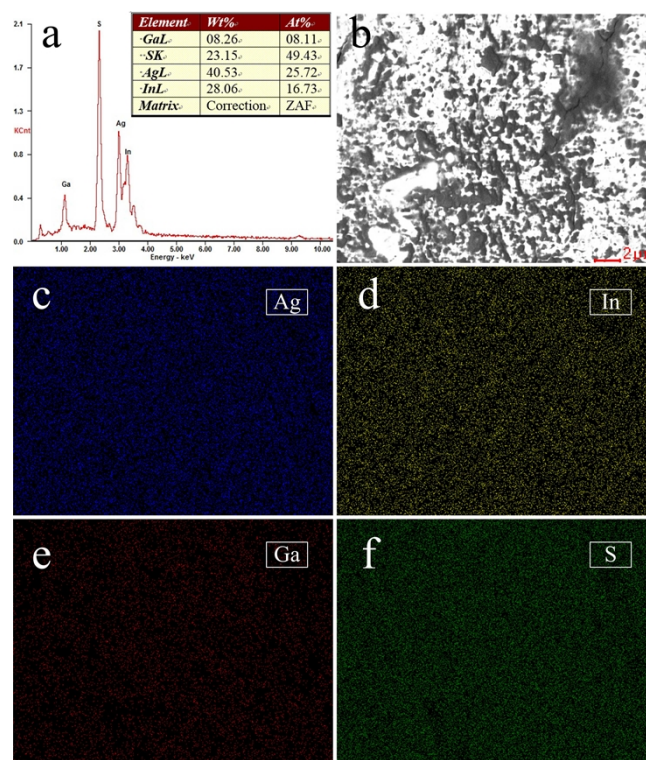


Fig. S4 EDX spectra and elemental distribution maps for Ag, In, Ga and S of the as-prepared $\text{AgIn}_{0.7}\text{Ga}_{0.3}\text{S}_2$ solid solution.

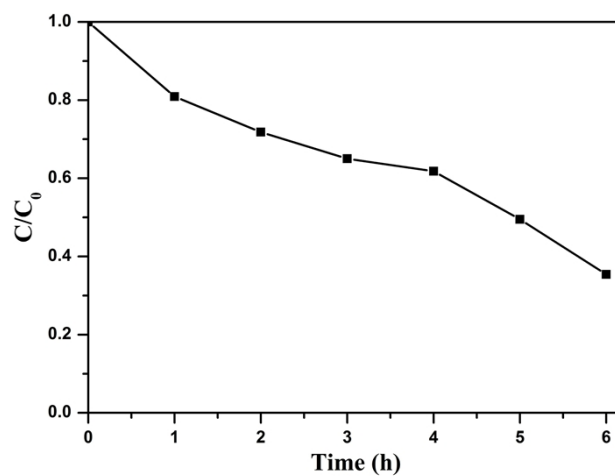


Fig. S5 Photocatalytic degradation of phenol aqueous solution (0.2 mmol L^{-1}) with $\text{AgIn}_{0.3}\text{Ga}_{0.7}\text{S}_2$ as photocatalyst under visible light irradiation ($\lambda > 400 \text{ nm}$).