Supporting Information

Facile solvothermal synthesis of 3D flowerlike β-In$_2$S$_3$ microspheres and their photocatalytic activity performance

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Figure S1 Fitting curve (26° to 29.5° in 2θ) of as-prepared 3D flowerlike In$_2$S$_3$ microspheres obtained in ethanol-water system with the volume ratio of 1:1 for 24 h.
Figure S2 XRD patterns of In$_2$S$_3$ nanocrystals synthesized at different reaction durations in ethanol-water system with the volume ratio of 1:1.
Figure S3 Schematic diagram of a projected view as TAA absorbed on the (222) surface of In$_2$S$_3$ to form a layer (● S, ● four-coordinated In and ● six-coordinated In).
Figure S4 XRD patterns of products obtained in ethanol-water system with the volume ratio of 1:0, 3:1, 1:3 and 0:1, respectively.
Figure S5 Time-dependent UV-vis absorption spectra using as-prepared 3D flowerlike In$_2$S$_3$ microspheres as photocatalyst.