

Electronic Supplementary Information

One-pot controlled synthesis of sea-urchin shaped $\text{Bi}_2\text{S}_3/\text{CdS}$ hierarchical heterostructures with excellent visible light photocatalytic activity

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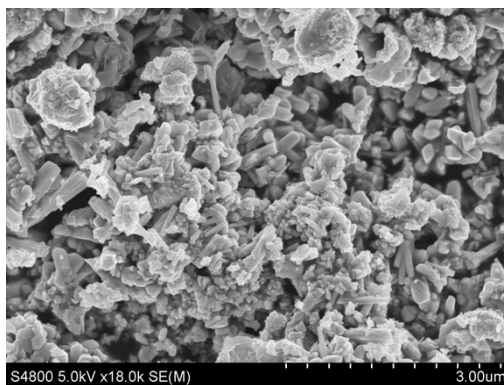


Fig. S1 SEM image of the crushed $\text{Bi}_2\text{S}_3/\text{CdS}$ hierarchical heterostructure composite (BC2).

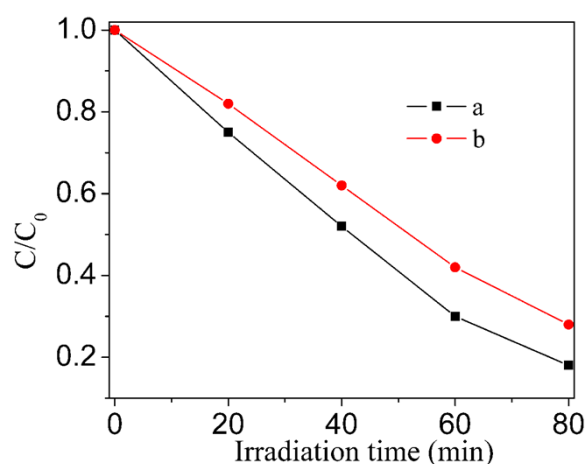


Fig. S2 Comparison of photocatalytic degradation of RhB aqueous solutions (10 mg/L) degraded by (a) the $\text{Bi}_2\text{S}_3/\text{CdS}$ hierarchical heterostructure composite (BC2) and (b) the crushed $\text{Bi}_2\text{S}_3/\text{CdS}$ hierarchical heterostructure composite (BC2) under visible light irradiation.

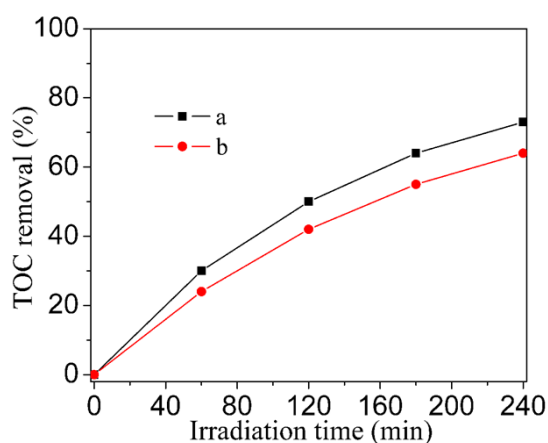


Fig. S3 The profiles of total organic carbon (TOC) removals for the photodegradation of RhB (10 mg/L) in different aqueous catalysts under visible light irradiation, (a) the $\text{Bi}_2\text{S}_3/\text{CdS}$ hierarchical heterostructure composite (BC2) and (b) the crushed $\text{Bi}_2\text{S}_3/\text{CdS}$ hierarchical heterostructure composite (BC2).