## **Electronic Supplementary Information**

One-step synthesis of hierarchical  $Bi_2S_3$  nanoflower $In_2S_3$ nanosheet composite with efficient visible light photocatalytic activity

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Fig. S1 SEM images of  $Bi_2S_3(A)$  and  $In_2S_3(B)$ .



**Fig. S2** EDS spectra of the products obtained from the different reaction times, (a) 30 min, (b) 1 h, (c) 4 h, (d) 10 h.



**Fig. S3** SEM images of the Bi<sub>2</sub>S<sub>3</sub>\In<sub>2</sub>S<sub>3</sub> composites obtained from different mole ratio of Bi salt and In salt, (a) 4:1, (b) 2:1, (c) 1:1.



Fig. S4 Proposed mechanism for photogenerated charges transfer over the  $Bi_2S_3\In_2S_3$  composite for the pollutants degradation process in aqueous solution under visible-light irradiation.



Fig. S5 Cycling runs in the photocatalytic degradation of 2, 4-dichlorophenol over  $Bi_2S_3\In_2S_3$  composite (Bi:In=3:1).