Electronic Supplementary Information

Single-crystalline $Bi_{19}Br_3S_{27}$ nanorods with efficiently improved photocatalytic activity

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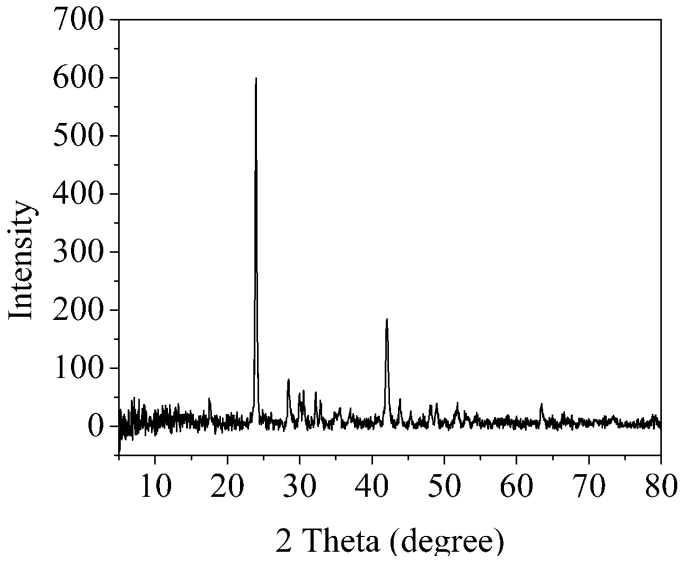

Fig. S1. XRD pattern of the prepared sample without use of glycerol.

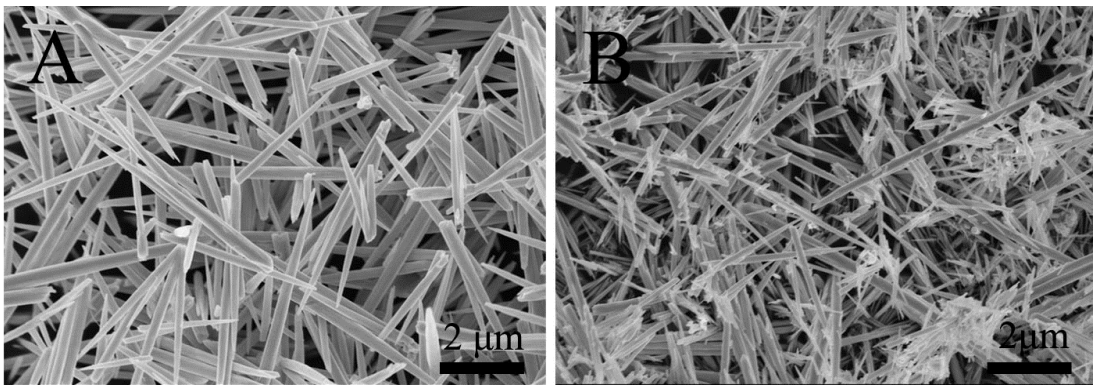

Fig. S2. SEM images of the prepared $Bi_{19}Br_3S_{27}$ with the use of glycerol (A) and without the use of glycerol (B).

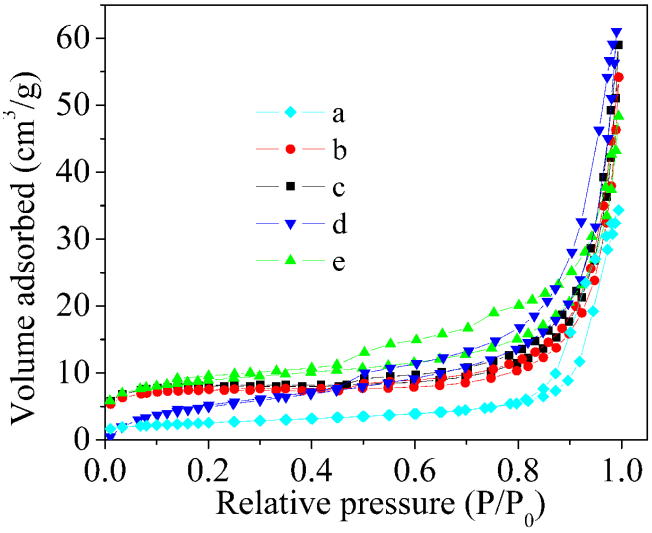

Fig. S3. N_2 adsorption-desorption isotherm curves of (a) Bi_2S_3 and $Bi_{19}Br_3S_{27}$ samples from (b) 6 h, (c) 2 h, (d) 0.5 h, and (e) 10 min.

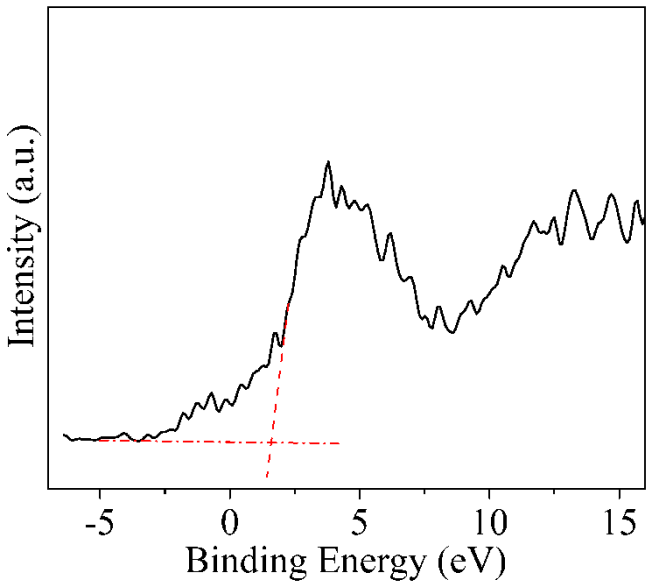

Fig. S4. Valence-band XPS spectrum of the $Bi_{19}Br_3S_{27}$.

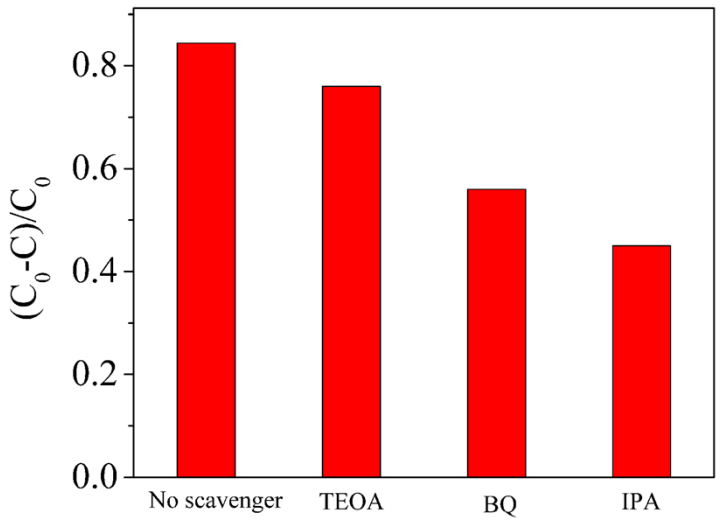

Fig. S5. Comparison of photocatalytic activities of different catalysts with different scavengers during the photocatalytic reaction under 60 min visible light irradiation, benzoquinone (BQ, a scavenger of $O_2^{\bullet -}$), 2-propanol (IPA, a scavenger of $^{\bullet}OH$), triethanolamine (TEOA, a scavenger of h^+).

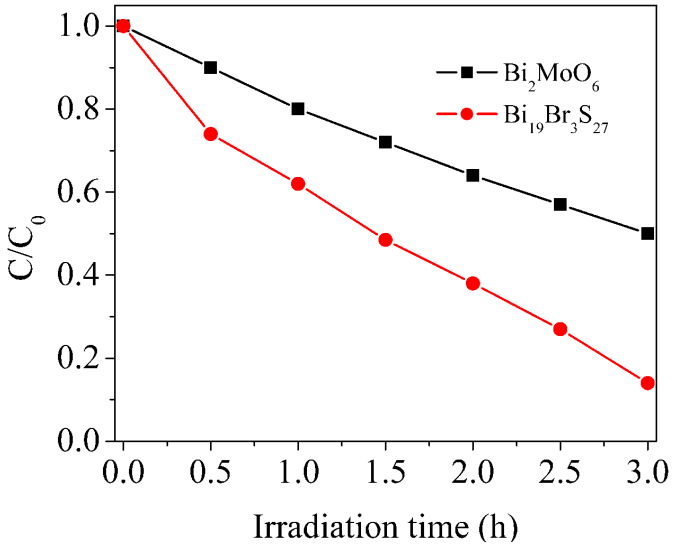

Fig. S6. Visible light photocatalytic degradation curves of the 2, 4-Dichlorophenol under Bi_2MoO_6 and $Bi_{19}Br_3S_{27}$.