

Electronic Supplementary Material

Precursor-Induced Fabrication of β - Bi_2O_3 Microspheres and their Performance as Visible-Light-Driven Photocatalysts

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Supplementary Figures

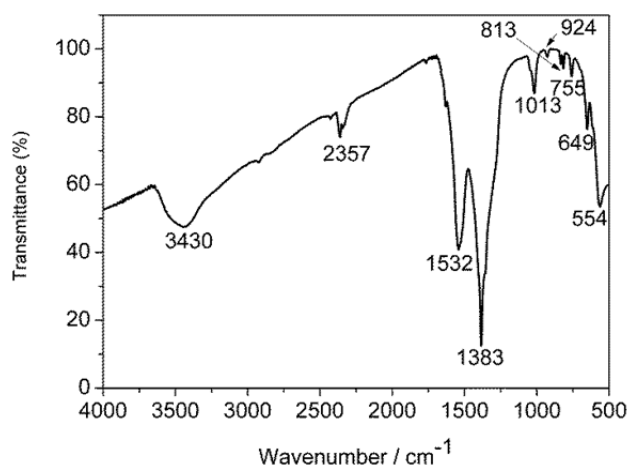


Fig. S1. IR Spectra of the precursor

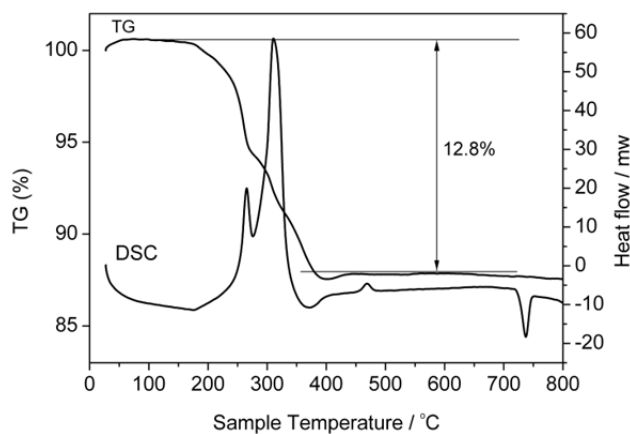


Fig. S2. TG-DSC curves of precursor

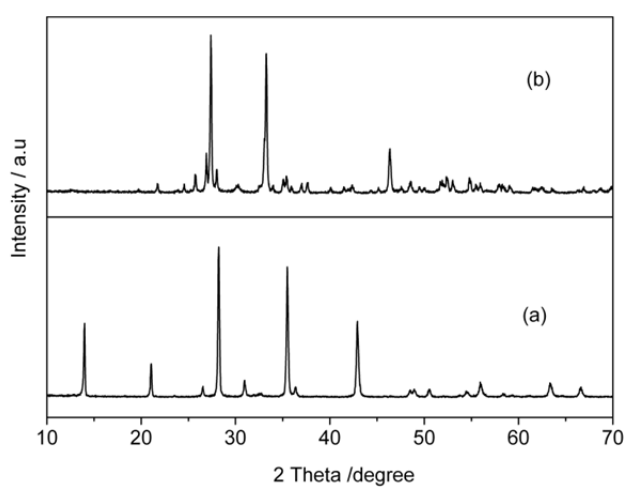


Fig. S3. XRD pattern of the (a) precursor obtained at longer reaction time 3 h, (b) α - Bi_2O_3 (350 °C for 4 h at heating rate of 2 °C min^{-1})

Table S1. Brunauer–Emmett–Teller (BET) specific surface areas for different samples.

Samples	precursor	β - Bi_2O_3	α - Bi_2O_3	Commercial Bi_2O_3
BET surface	25.8	10.6	4.8	0.4
$/\text{m}^2\text{g}^{-1}$				

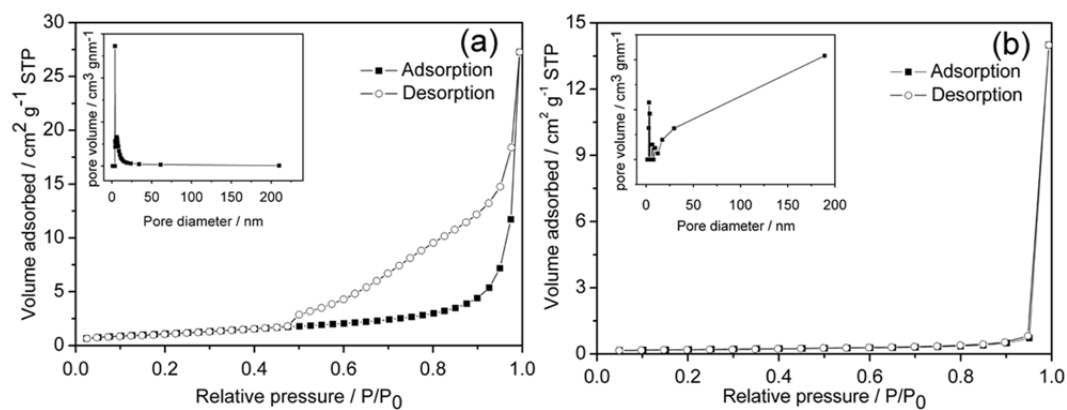


Fig. S4. N_2 gas adsorption-desorption isotherms of the as prepared samples: (a) precursor, (b) $\beta\text{-Bi}_2\text{O}_3$; Insert: the corresponding pore-size distribution.

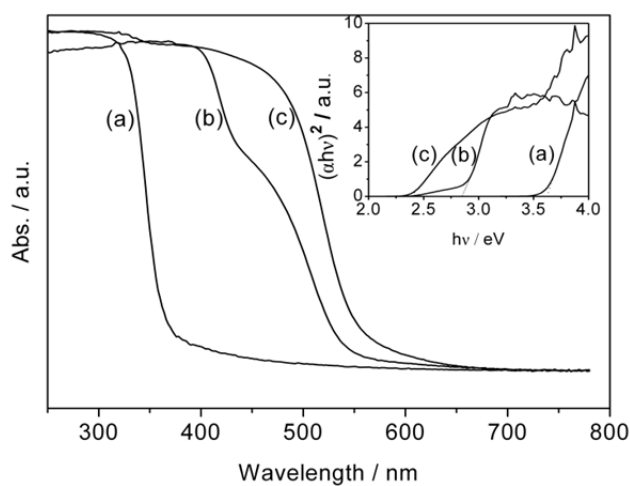


Fig. S5. UV-vis diffuse reflectance spectra of the as prepared samples: (a) precursor, (b) $\alpha\text{-Bi}_2\text{O}_3$, and (c) $\beta\text{-Bi}_2\text{O}_3$; Insert: the corresponding plots of $(\alpha h\nu)^2$ versus energy ($h\nu$).