

## Electronic supplementary information

### Novel $\text{Bi}_{12}\text{ZnO}_{20}\text{-Bi}_2\text{WO}_6$ Heterostructures: Facile Synthesis and Excellent Visible-Light-Driven Photocatalytic Activities

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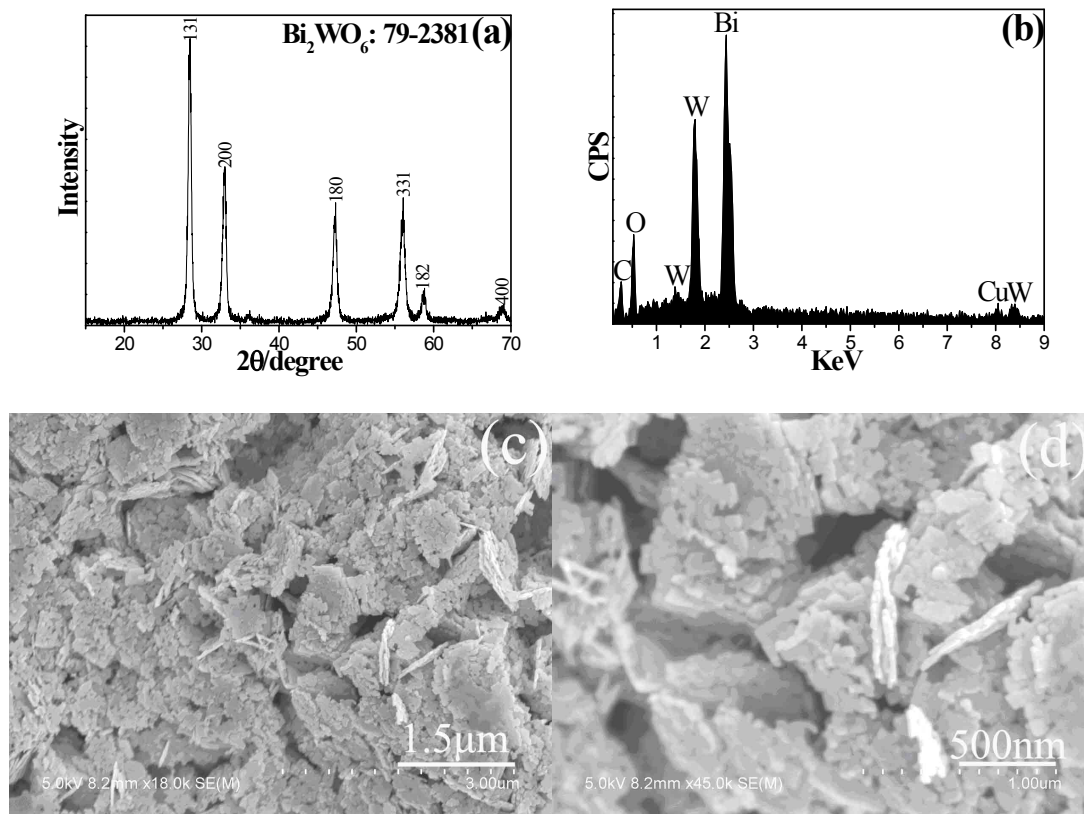
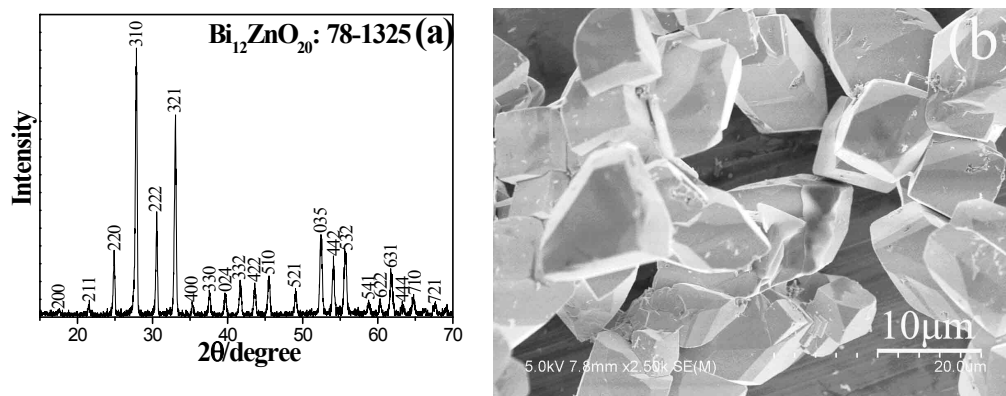
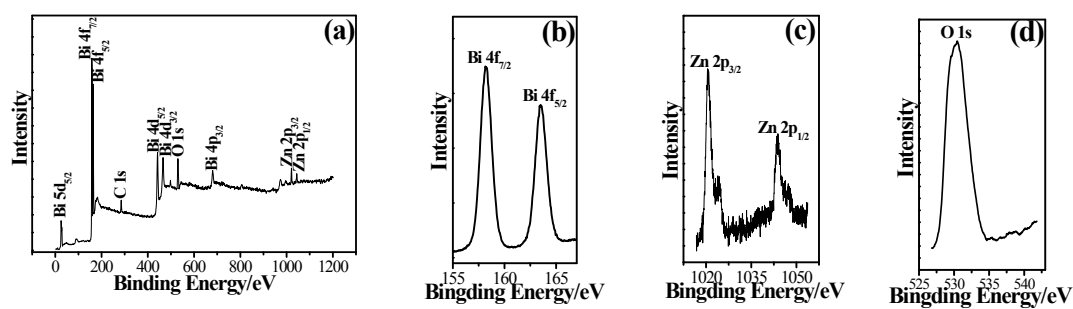


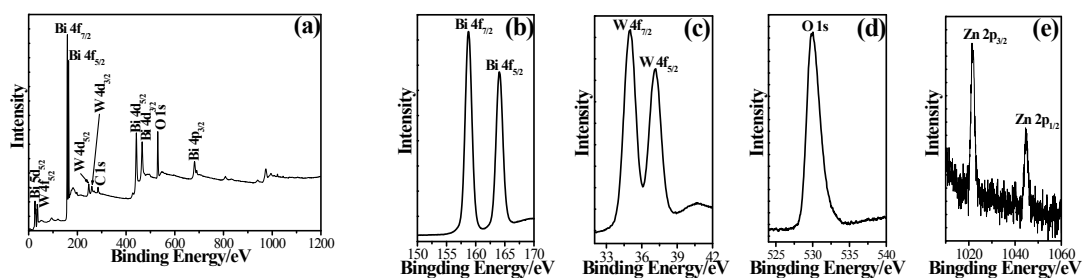
Fig. S1 XRD pattern (a), EDS spectrum (b) and (c, d) SEM images of as-prepared BWO sample.



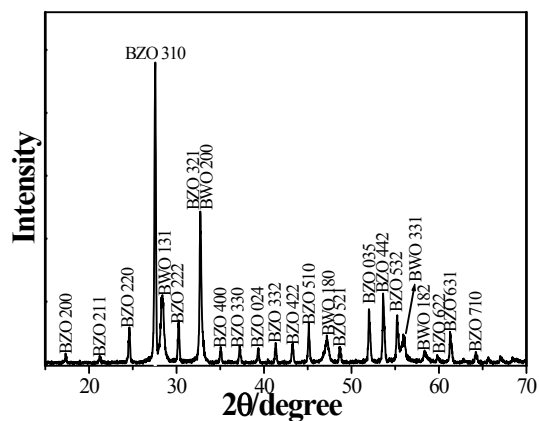
**Fig. S2** XRD pattern and SEM image of BZO microcrystals prepared under hydrothermal synthesis method.



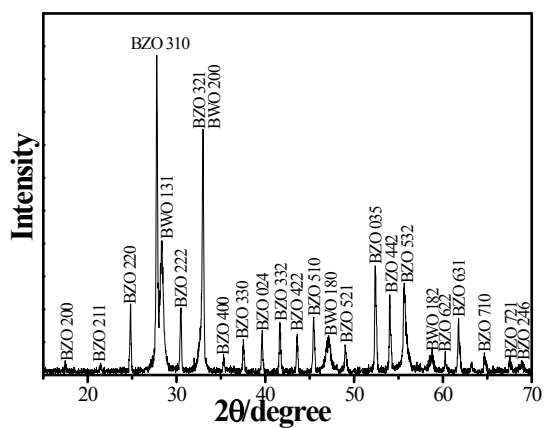
**Fig. S3** XPS spectra of BZO microcrystals prepared under hydrothermal synthesis method.



**Fig. S4** XPS spectra of BZO (BZO/BWO = 30%, wt%)-BWO heterostructures prepared under hydrothermal synthesis method.



**Fig. S5** XRD pattern of BZO (BZO/BWO = 30%, wt%)-BWO heterostructures prepared under hydrothermal synthesis method.



**Fig. S6** XRD pattern of BZO-BWO composite photocatalyst (BZO + BWO) by physical mixture of pure BZO and BWO.