

Electronic Supplementary Information

**Fabrication of Bi₂Sn₂O₇-ZnO Heterostructures with
Enhanced Photocatalytic Activity**

Yonglei Xing^a, Wenxiu Que,^{a,*} Xingtian Yin^a, Xiaobin Liu^a, H. M. Asif Javed^a, Yawei

Yang^a and Ling Bing Kong^{b,*}

*^a Electronic Materials Research Laboratory, International Center for Dielectric Research, Key
Laboratory of the Ministry of Education, School of Electronic and Information Engineering, Xi'an
Jiaotong University, Xi'an 710049, Shaanxi, P.R.China.*

**Tel.: +86-29-82668679; Fax: +86-29-82668794. Email address: wxque@mail.xjtu.edu.cn*

*^b School of Materials Science and Engineering, Nanyang Technological University, Nanyang Avenue,
Singapore 639798, Singapore. *Email address: ELBKong@ntu.edu.sg*

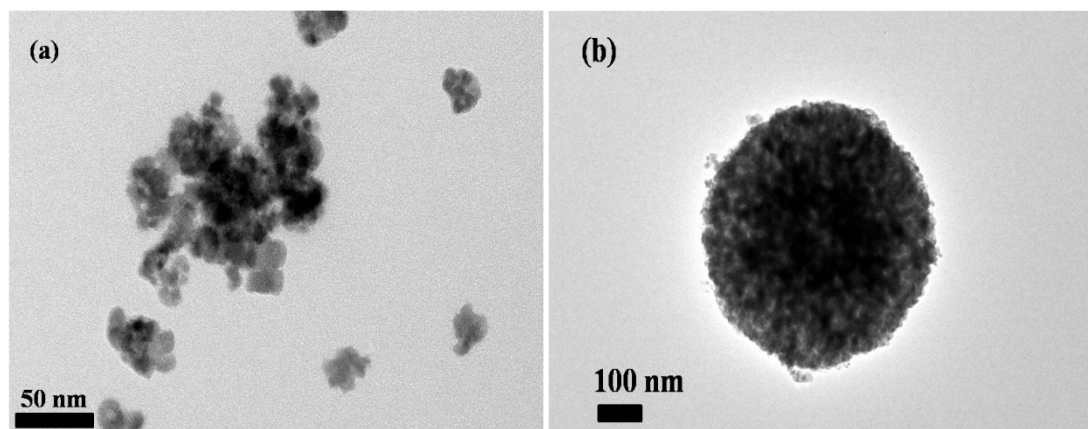


Figure S1 TEM images of pure ZnO and BSO.

Table S1. Contents of the elements.

Element	Weight %
O	21.04
Bi	17.54
Sn	13.10
Zn	48.31

Table S2. pH value change of the RhB solution during the photodegradation process.

	RhB	0 min	10 min	40 min	70 min	100 min	130 min	160 min
BSO	7.05	8.08	8.06	8.16	8.12	8.06	8.08	8.04
ZnO	7.05	7.64	8.00	7.92	7.76	7.79	7.86	7.78
12.5BSO-ZnO	7.05	7.19	7.23	7.34	7.64	7.65	7.59	7.54

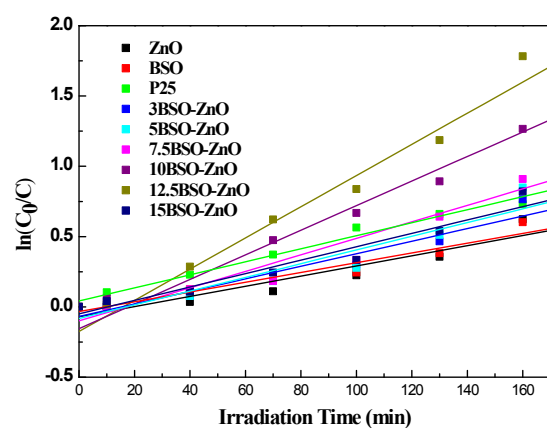


Figure S2 First-order kinetics of RhB photocatalytic degradation over different samples.

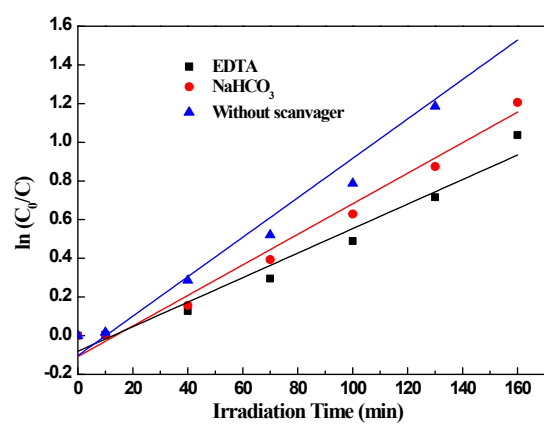


Figure S3 First-order kinetics of RhB photocatalytic degradation with and without of EDTA and NaHCO_3 .