

*Electronic Supplementary Information for*

**A Self-sacrifice Template Route to Iodine Modified BiOIO<sub>3</sub>:  
Band Gap Engineering and Highly Boosted Visible-Light  
Active Photoreactivity**

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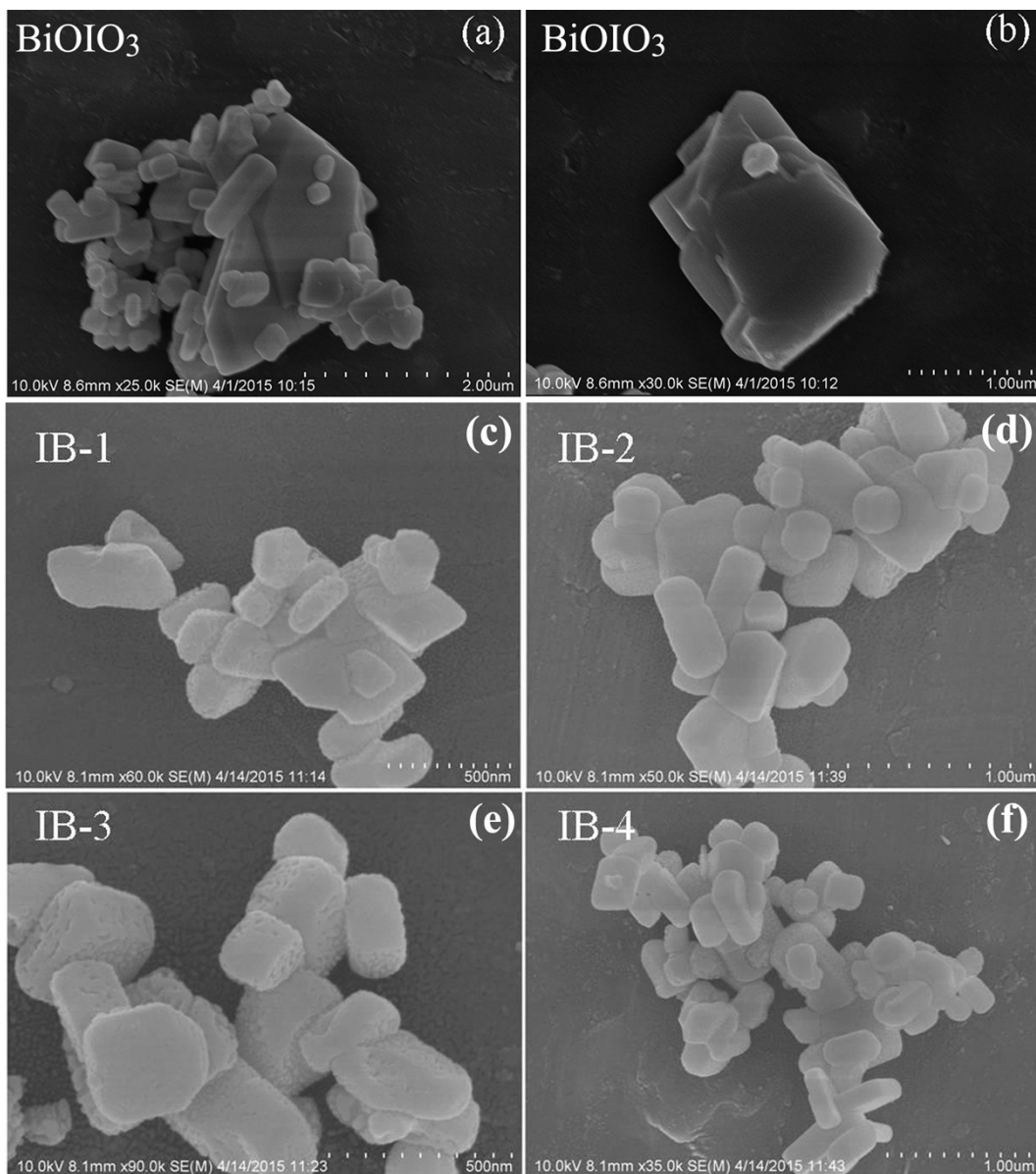
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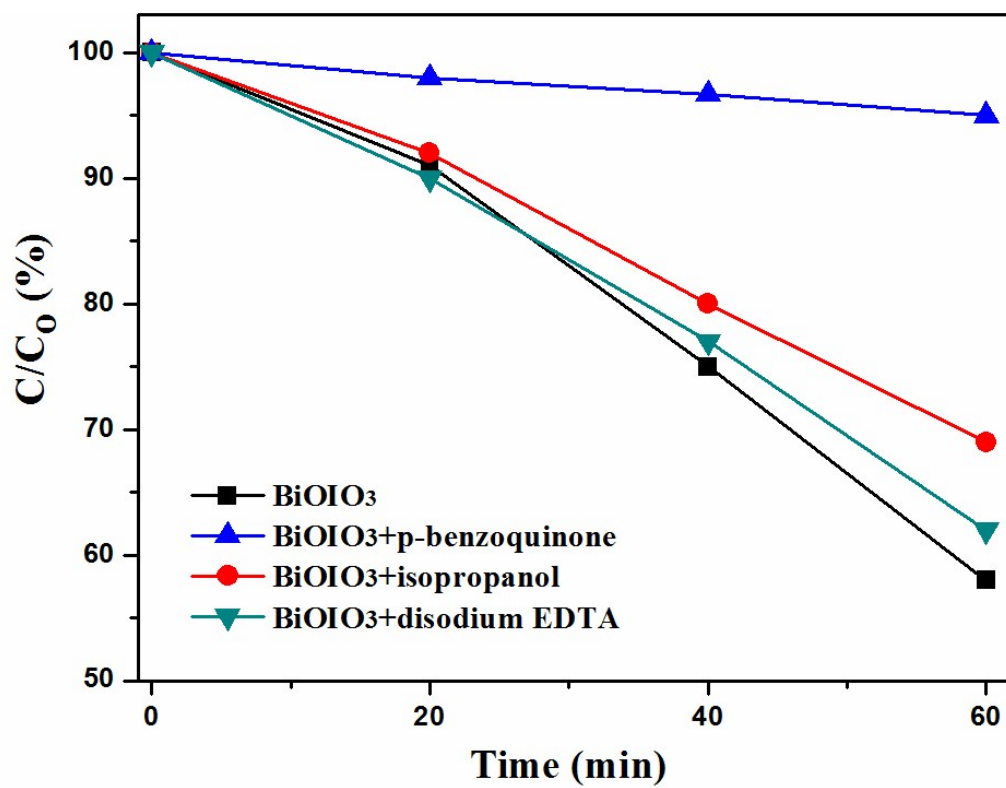
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**Table S1.** The adsorption data of RhB and MO in darkness.

<b>Samples</b>		<b>BiOIO<sub>3</sub></b>	<b>IB-1</b>	<b>IB-2</b>	<b>IB-3</b>	<b>IB-4</b>
<b>c/c<sub>0</sub></b>	<b>RhB</b>	<b>97.23%</b>	<b>96.65%</b>	<b>98.43%</b>	<b>93.38%</b>	<b>94.55%</b>
<b>c/c<sub>0</sub></b>	<b>MO</b>	<b>98.06%</b>	<b>97.28%</b>	<b>96.34%</b>	<b>96.58%</b>	<b>98.54%</b>



**Figure S1.** SEM images of (a, b) BiOI, (c) IB-1, (d) IB-2, (e) IB-3 and (f) IB-4.



**Figure S2.** Photodegradation of RhB over BiOI<sub>3</sub> in the presence of different scavengers under visible light ( $\lambda > 420$  nm).