

*Supporting information*

**Defect-sate of Indium Doped Bismuth Molybdate Nanosheets for  
Enhanced Photoreduction of Chromium (VI) under Visible Light  
Illumination**

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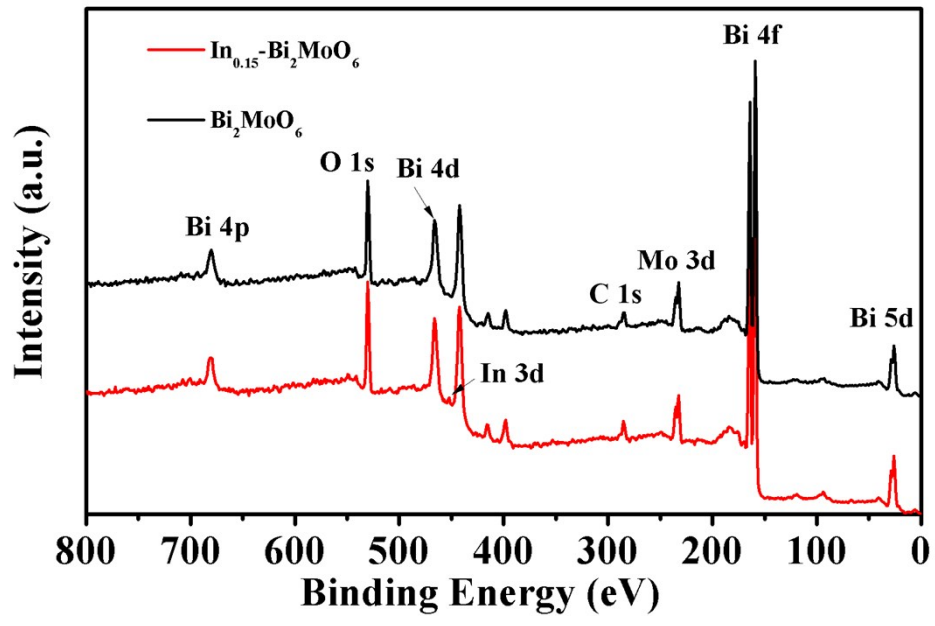
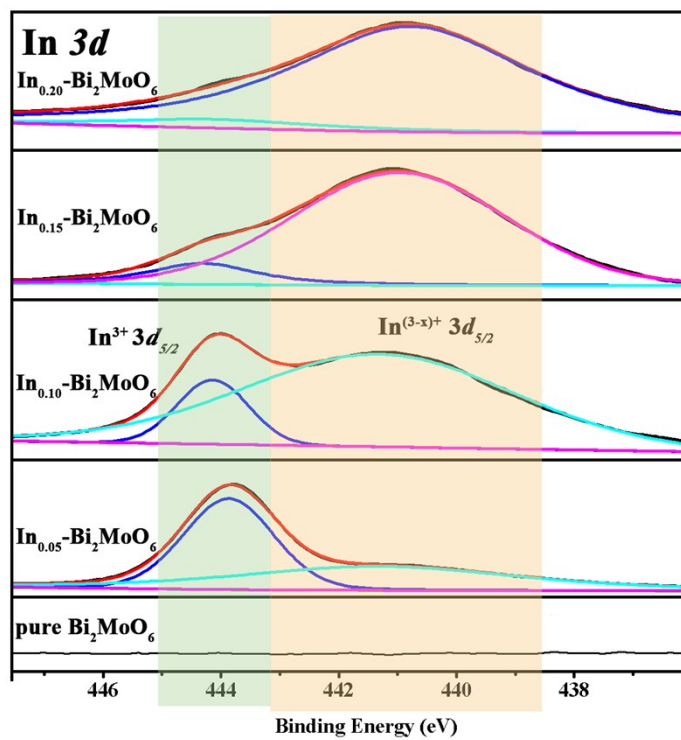
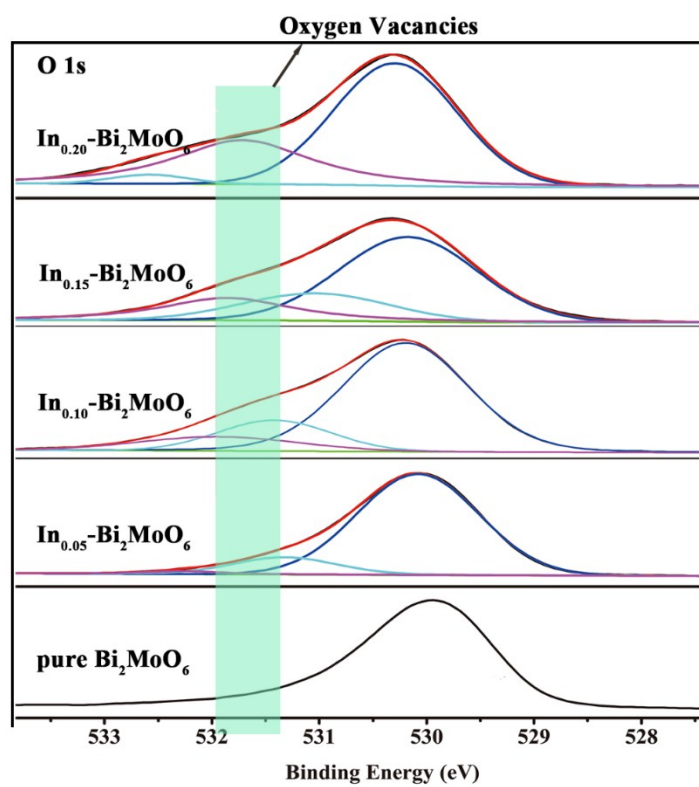


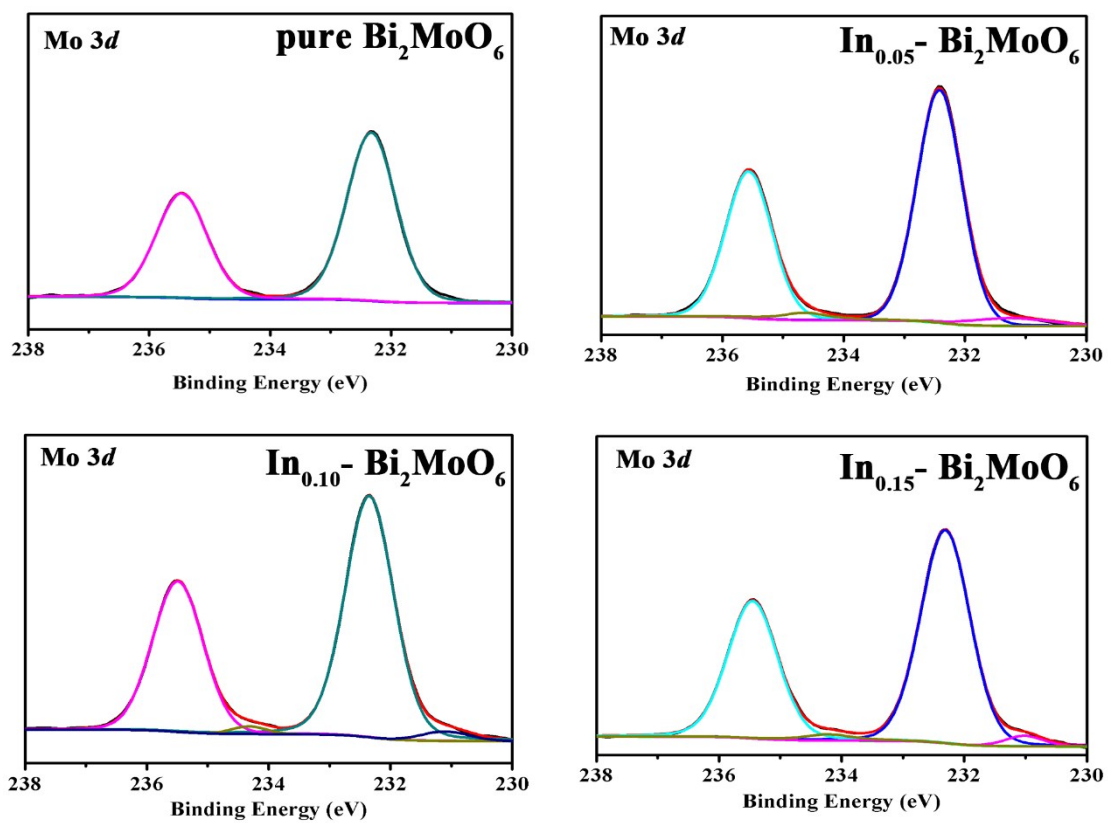
Figure S1. Survey spectrum of pure  $\text{Bi}_2\text{MoO}_6$  and  $\text{In}_{0.15}\text{-Bi}_2\text{MoO}_6$  sample.



**Figure S2** Evolution of In  $3d_{5/2}$  spectrums of prepared samples with different indium doped amount.



**Figure S3.** Evolution of O 1s spectrums of prepared samples with different indium doped amount.



**Figure S4.** Evolution of Mo 3d spectrums of prepared samples with different indium doped amount

**Table S1.** Variation of Mo-O bond calculated from Raman spectrum of prepared samples.

	Pure Bi <sub>2</sub> MoO <sub>6</sub>	In <sub>0.15</sub> -Bi <sub>2</sub> MoO <sub>6</sub>	$\Delta$ shift	Mo-O Bond Type
Location 1 (cm <sup>-1</sup> )	717.50	713.77	-3.73	equatorial octahedron
Band length 1 (Å)	1.84529	1.84780	+0.00251	
Location 2 (cm <sup>-1</sup> )	796.59	794.13	-2.46	vertex octahedron
Band length 2 (Å)	1.79486	1.79634	+0.00148	
Location 3 (cm <sup>-1</sup> )	845.56	849.22	+3.66	vertex octahedron
Band length 3 (Å)	1.76607	1.76398	-0.00209	

- presents moving toward low Raman shift or the reduce of bond length

+ presents moving toward high Raman shift or the increase of bond length