

## Supporting Information

### **Synthesis of Bi<sub>6</sub>Mo<sub>2</sub>O<sub>15</sub> sub-microwires via an Molten Salt Method and Enhance Photocatalytic Reduction of CO<sub>2</sub> into Solar Fuel through Tuning Surface Oxide Vacancies by Simple Post-Heating Treatment**

*Ping Li,<sup>†,‡,§</sup> Yong Zhou,<sup>‡,§,\*</sup> Wenguang Tu,<sup>§,†,‡,§</sup> Rui Wang,<sup>†,§</sup> Chunfeng Zhang,<sup>†,§</sup> Qi Liu,<sup>†,‡,‡</sup> Haijin Li,<sup>†,‡</sup> Zhengdao Li,<sup>†,‡,‡</sup> Hui Dai,<sup>†,‡</sup> Jiajia Wang,<sup>†,‡,‡</sup> Shicheng Yan,<sup>†,‡,‡</sup> Zhigang Zou,<sup>†,‡,‡,§,\*</sup>*

<sup>‡</sup>Key Laboratory of Modern Acoustics, MOE, Institute of Acoustics, Department of Physics,

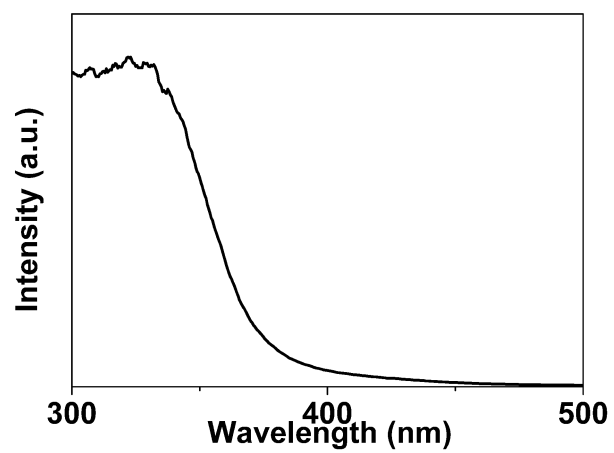
<sup>†</sup>National Laboratory of Solid State Microstructures,

<sup>‡</sup>Eco-materials and Renewable Energy Research Center (ERERC),

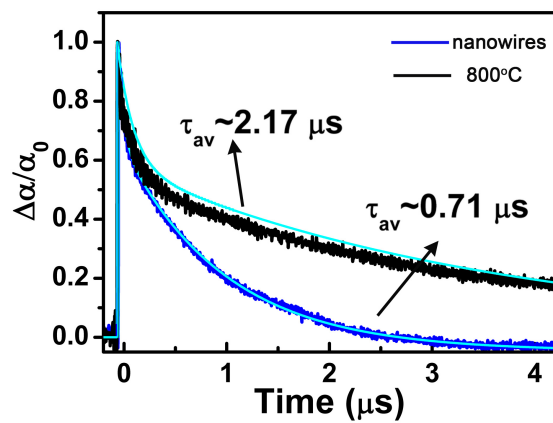
<sup>§</sup>School of Physics,

<sup>#</sup>Department of Materials Science and Engineering, Nanjing University, Nanjing 210093, P. R.

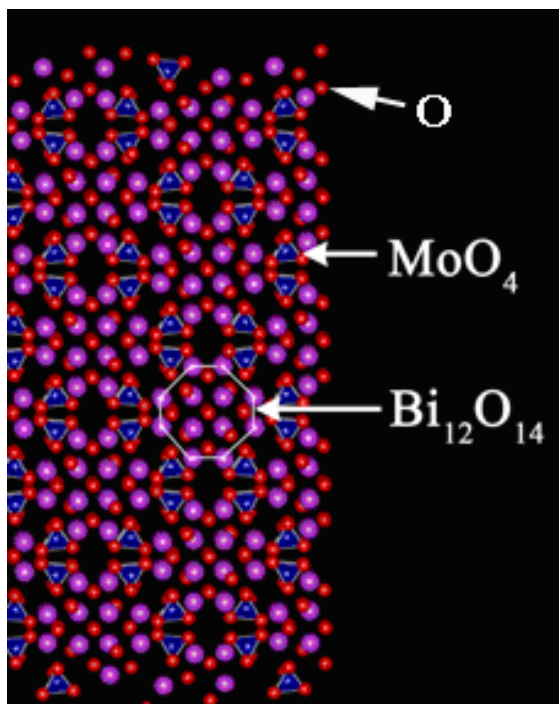
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**Figure S1.** UV-vis absorption spectrum of the as-synthesize Bi<sub>6</sub>Mo<sub>2</sub>O<sub>15</sub> nanowires.



**Figure S2** Femtosecond transient absorption spectra of the  $\text{Bi}_6\text{Mo}_2\text{O}_{15}$  nanowires before and after 800 °C heating treatment.



**Figure S3** Molecular structure of  $\text{Bi}_6\text{Mo}_2\text{O}_{15}$ .