## Supporting Information

**3D** Heterogeneous CTF@TiO<sub>2</sub>/Bi<sub>2</sub>WO<sub>6</sub>/Au Hybrids Supported by Hollow Carbon Tubes and Their Efficient Photocatalytic Performance in The UV-vis Range

Aiqin Gao,<sup>a</sup> Ju Wang,<sup>a</sup> Huanghuang Chen,<sup>b</sup> Aiqin Hou,<sup>b</sup> Kongliang Xie<sup>\*a</sup>

<sup>a</sup>College of Chemistry, Chemical Engineering and Biotechnology, Donghua

University, Shanghai 201620, PR China

Corresponding to: klxie@dhu.edu.cn

<sup>b</sup>National Engineering Research Center for Dyeing and Finishing of Textiles,

Donghua University, Shanghai 200051, China

## Supporting data

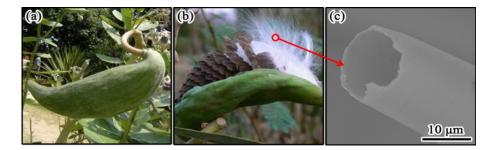


Figure S1. Photographs of the (a) CG plant and (b) ripe fruit and SEM image of CGF.

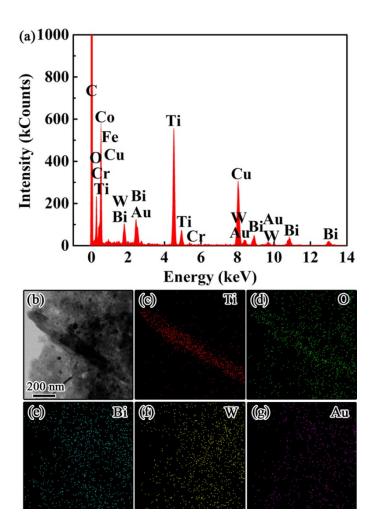


Figure S2. (a) EDS pattern and (b-g) elemental mapping images of the  $TiO_2/Bi_2WO_6/Au$  sample peeled from  $CTF@TiO_2/Bi_2WO_6/Au$ .

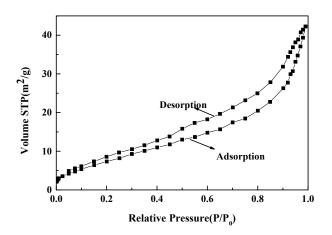


Figure S3. N<sub>2</sub> adsorption-desorption curve of CTF@TiO<sub>2</sub>/Bi<sub>2</sub>WO<sub>6</sub>/Au.

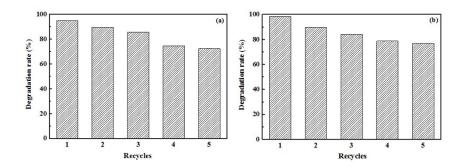


Figure S4. Recyclability of  $CTF@TiO_2/Bi_2WO_6/Au$  under (a) UV light and (b) visible light irradiation.