# Supporting Information

for

# Hierarchical heterostructures of $Bi_2MoO_6$ microflowers decorated with $Ag_2CO_3$ nanoparticles for efficient visible-light-driven photocatalytic removal of toxic pollutants

Shijie Li*[1], Wei Jiang[1], Shiwei Hu[1], Yu Liu[1], Yanping Liu[2], Kaibing Xu*[3] and Jianshe Liu[4]

Address: [1]Key Laboratory of key technical factors in Zhejiang seafood health hazards Institute of Innovation & Application, Zhejiang Ocean University, Zhoushan, Zhejiang Province, 316022, China; [2]Department of Environmental Engineering, Zhejiang Ocean University, Zhoushan, Zhejiang Province, 316022, China; [3]State Key Laboratory for Modification of Chemical Fibers and Polymer Materials, Research Center for Analysis and Measurement, Donghua University, Shanghai, 201620, China and [4]State Environmental Protection Engineering Center for Pollution Treatment and Control in Textile Industry, College of Environmental Science and Engineering, Donghua University, Shanghai 201620, China

Email: Shijie Li - lishijie@zjou.edu.cn; Kaibing Xu- xukaibing@dhu.edu.cn

* Corresponding author

## Additional experimental data

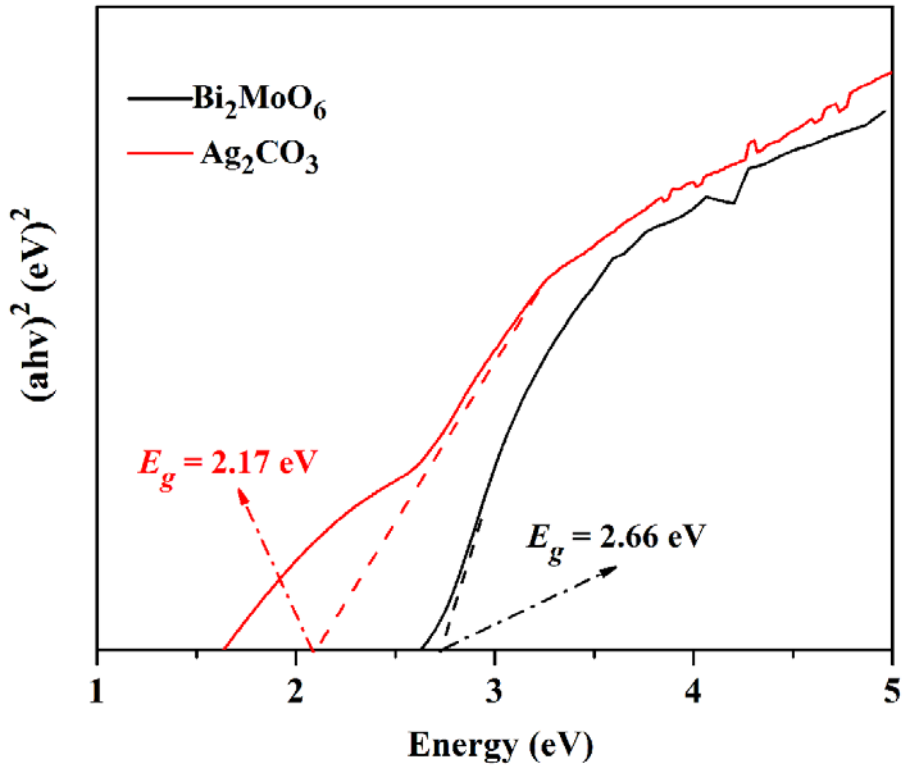


**Figure S1:** Tauc plots of $Ag_2CO_3$ and $Bi_2MoO_6$.

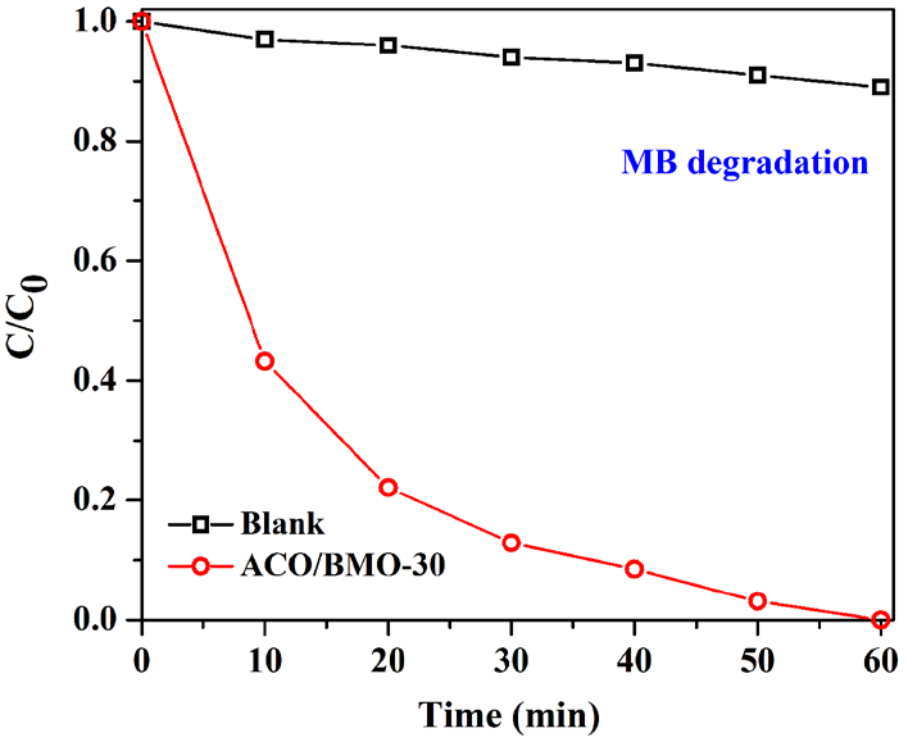


**Figure S2:** The photocatalytic degradation of MB over ACO/BMO-30.

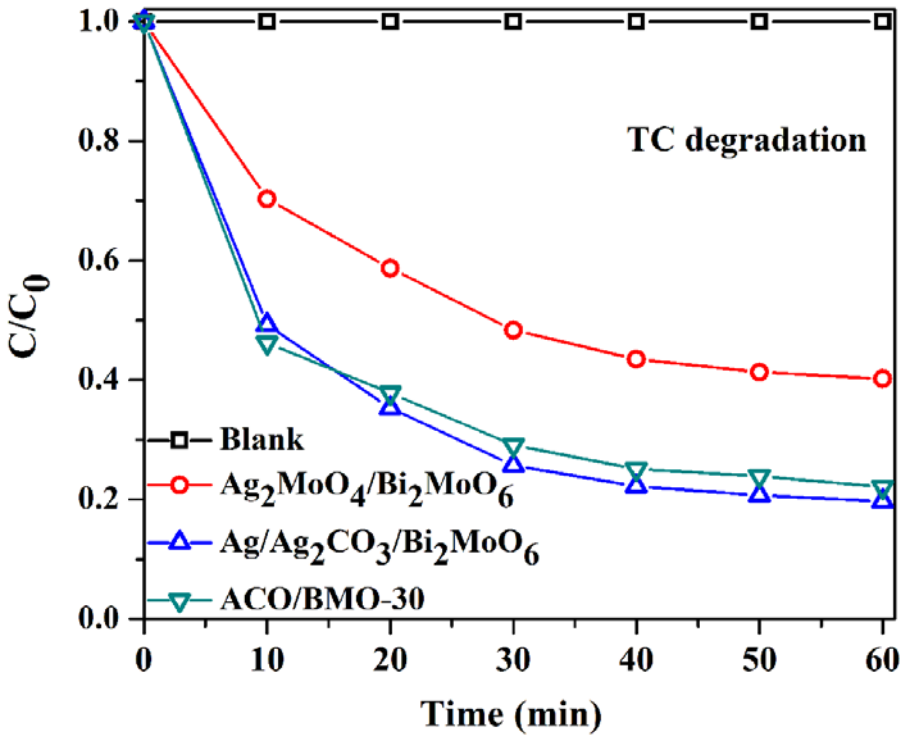


**Figure S3:** Photocatalytic degradation of TC (100 mL, 20 mg·L$^{-1}$) over ACO/BMO-30, $Ag/Ag_2CO_3/Bi_2MoO_6$, and $Ag_2MoO_4/Bi_2MoO_6$.

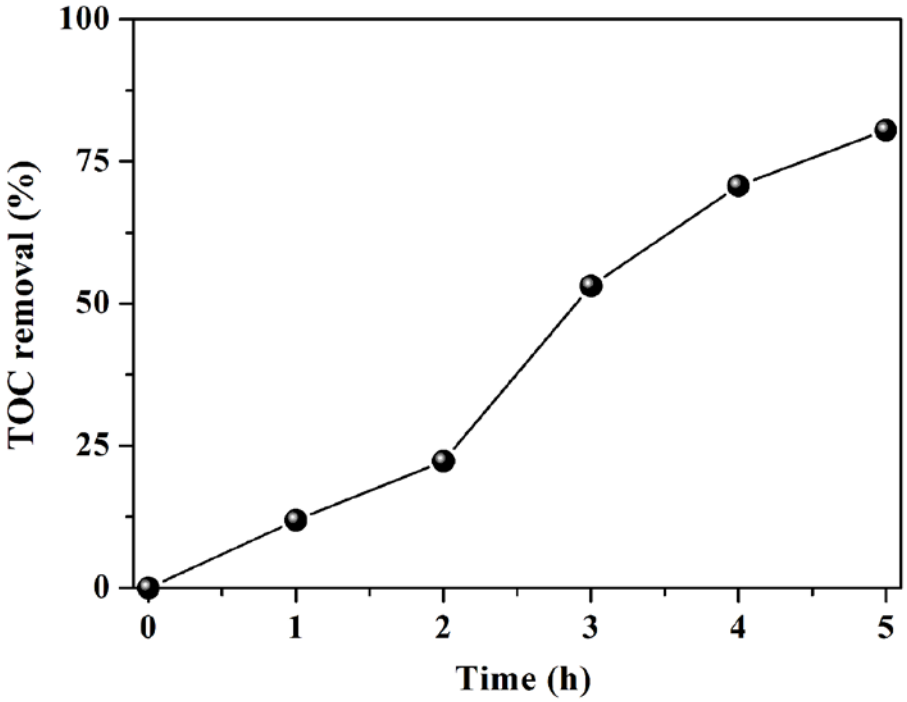


**Figure S4:** TOC removal during the photocatalytic reaction.

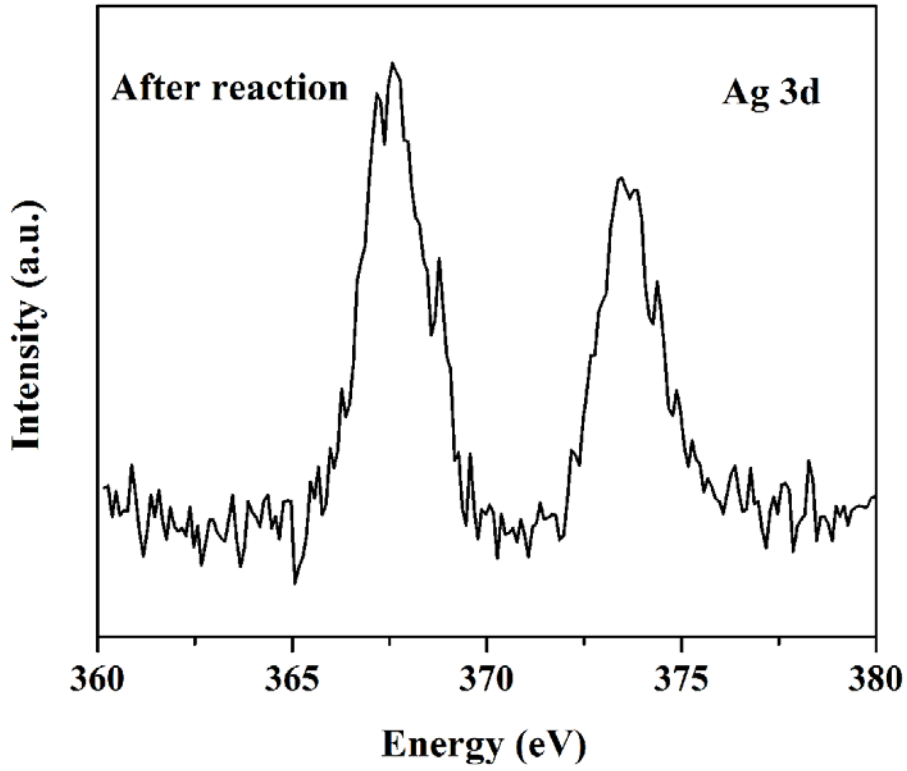


**Figure S5:** High-resolution XPS spectra of Ag 3d for ACO/BMO-30 after photocatalytic reaction.