

Supporting Information

Visible-Light-Driven Photoelectrocatalytic Degradation of Tetracycline Using Dual Z-Scheme $\text{Bi}_2\text{MoO}_6/\text{GQDs}/\text{TiO}_2$ Heterojunctions

Feiyu Li, Kailu Liu, Hanyue Zhang, Xing Wang, Jingui Ma, Yansheng Liu and Junwei Hou

*State Key Laboratory of Heavy Oil Processing, China University of Petroleum (Beijing)
at Karamay, Karamay, Xinjiang 834000, China*

This part includes 7 figures.

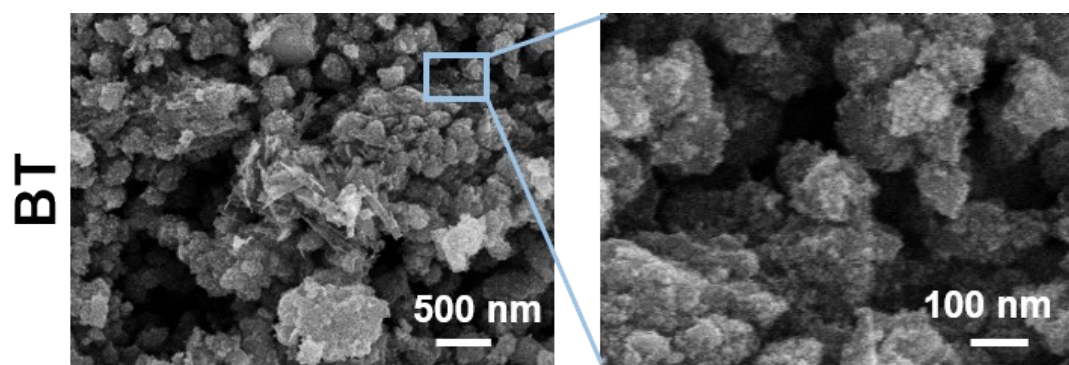


Figure S1. SEM images of BT.

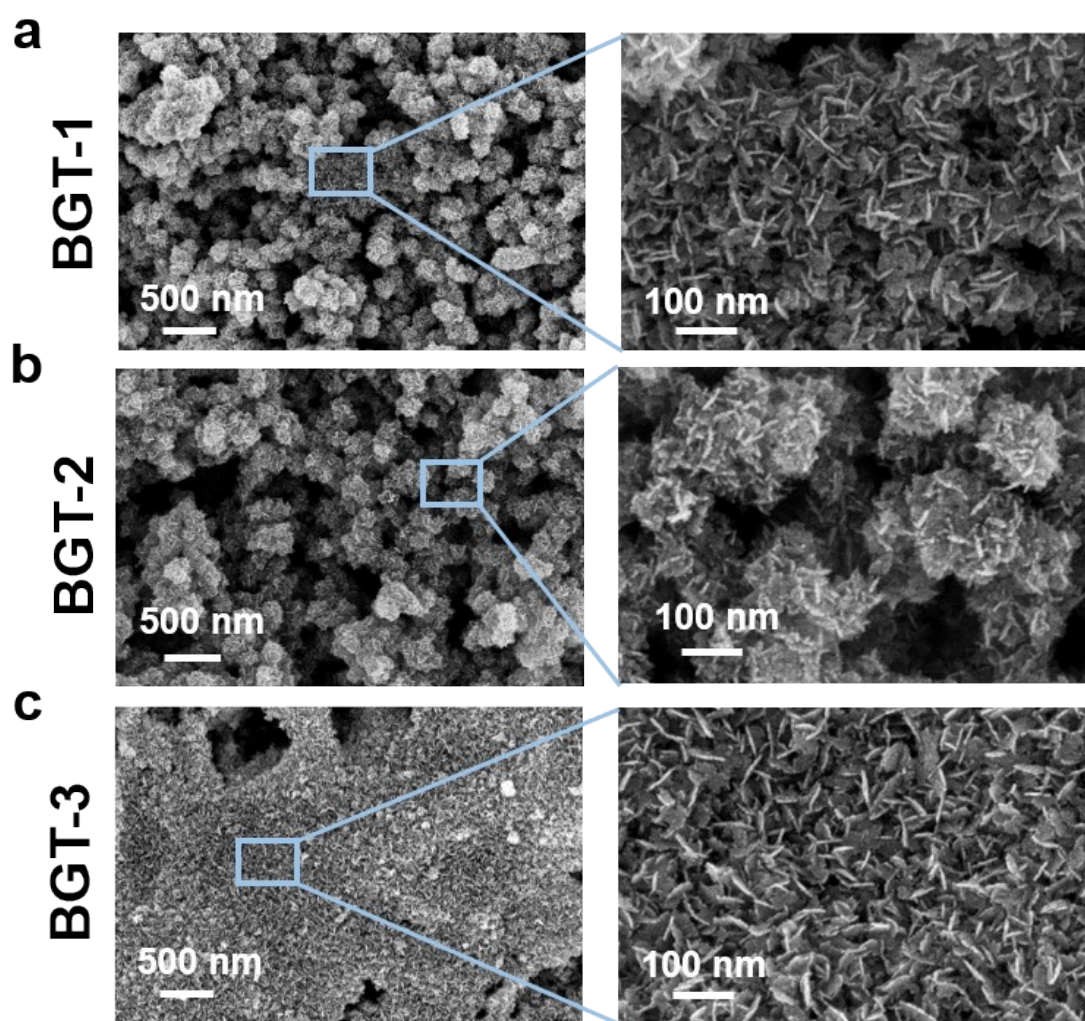


Figure S2. SEM images of (a) BGT1, (b) BGT-2 and (c) BGT-3 with different GQDs concentrations.

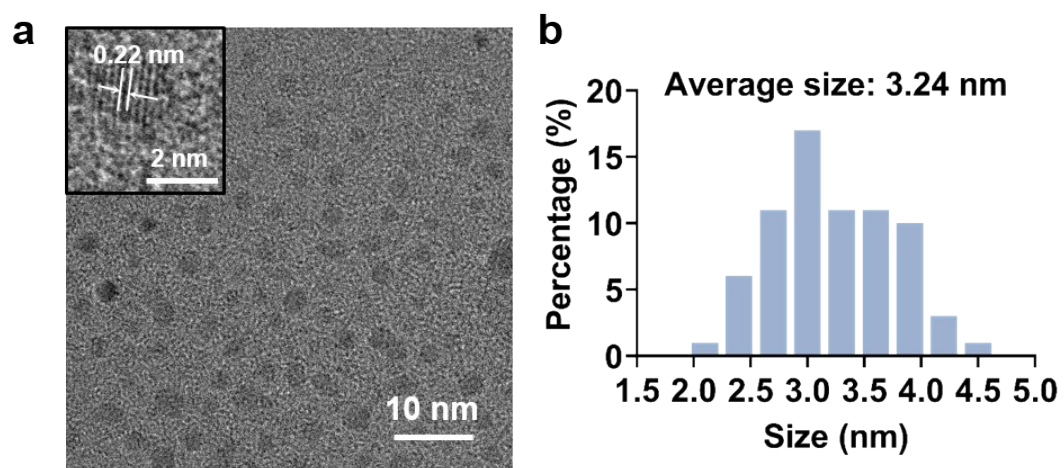


Figure S3. (a) TEM images and (b) the size distribution of GQDs.

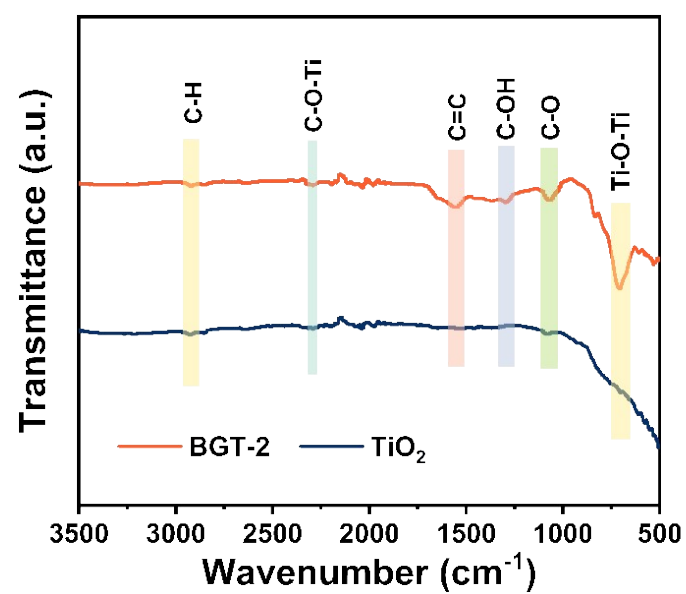


Figure S4. FTIR spectra of TiO₂ and BGT-2.

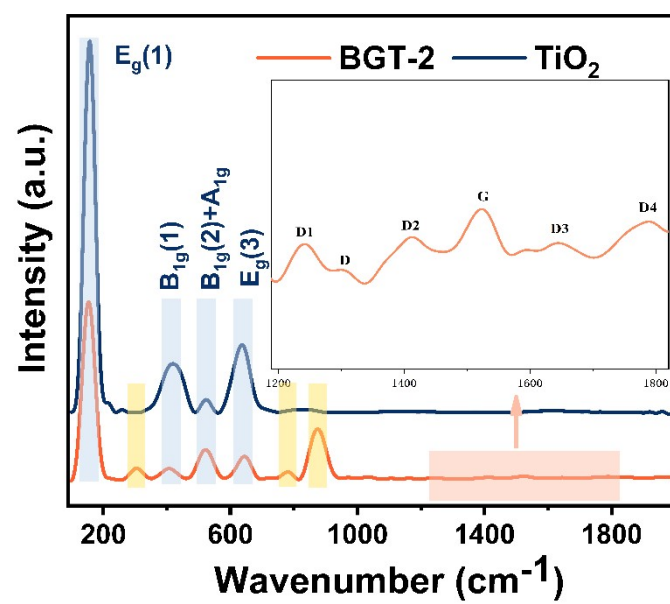


Figure S5. Raman spectra of TiO₂ and BGT-2.

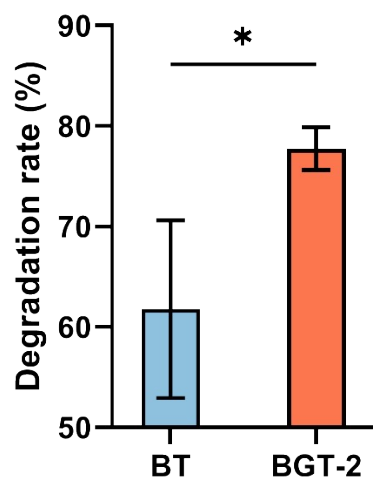


Figure S6. Statistical significance analysis of degradation rates by BGT-2 and BT photocatalyst. Statistical significance was analyzed via the two-tailed Student's t-test ($***p < 0.001$, $**p < 0.01$, and $*p < 0.05$). ($n=5$)

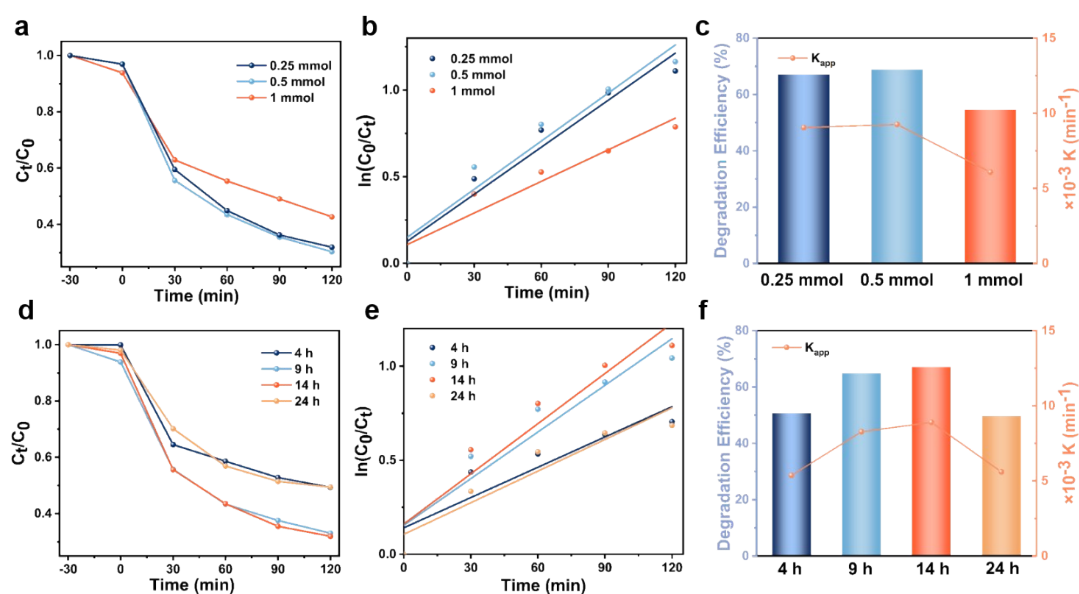


Figure S7. (a) Time-dependent photodegradation curves, (b) kinetic curves, and (c) degradation efficiency and rate constants for TC of BGT materials with different hydrothermal times. (d) Time-dependent photodegradation curves, (e) kinetic curves, and (f) degradation efficiency and rate constants for TC of BGT materials with different Bi_2MoO_6 contents

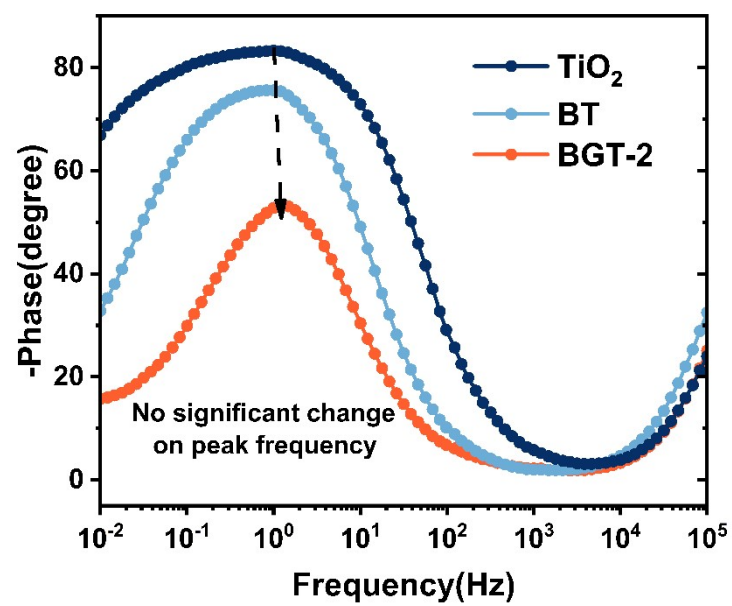


Figure S8. Bode plots of TiO₂, BT, and BGT-2.

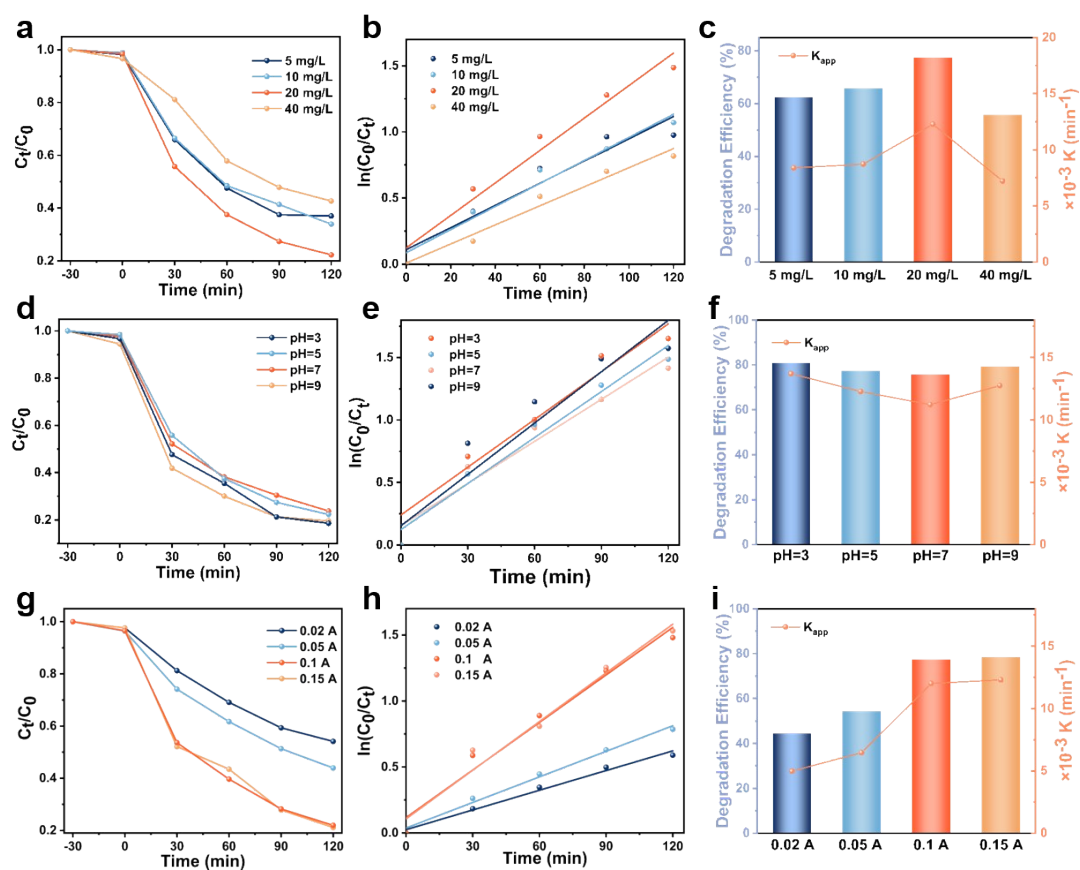


Figure S9. Time-dependent PEC degradation curves, kinetic curves, and degradation efficiency and rate constants for TC degradation of BGT-2 under different (a-c) initial concentration of TC, (d-f) pH value, and (g-i) applied current.

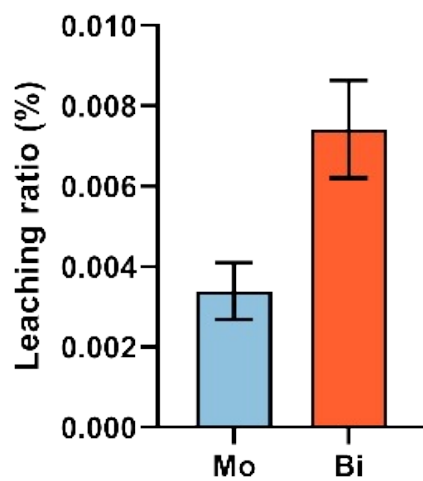


Figure S10. Ratio of Mo/Bi leaching after PEC process. (n=5)