Electronic Supplementary Information (ESI)

Graphene oxide coupled AgBr nanosheets: an efficient dual-functional visible-light-responsive nanophotocatalyst with enhanced performance

Jizhuang Wang,[a] Changhua An,*[a] Junxue Liu,[a] Guangzhao Xi,[a] Wen Jiang,[a] Shutao Wang,[a] and Qinhui Zhang[b]

[a] *State Key Laboratory of Heavy Oil Processing and Key Laboratory of New Energy Physics & Materials Science in Universities of Shandong, College of Science, China University of Petroleum, Qingdao, Shandong 266580, P. R. China. Fax: (+) 86-532-86981787; E-mail: anchh@ustc.edu*

[b] *State Key Laboratory of Heavy Oil, College of Chemical Engineering, China University of Petroleum, Qingdao, 266580, P. R. China.*

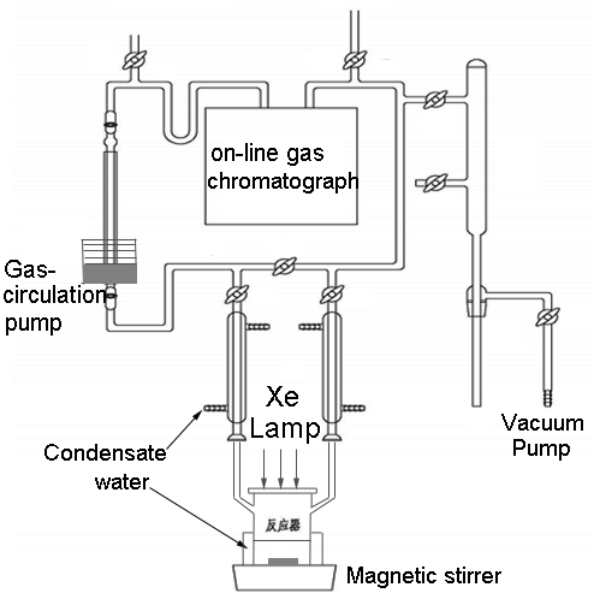

Figure S1. The schematic illusion of the hydrogen evolution system.

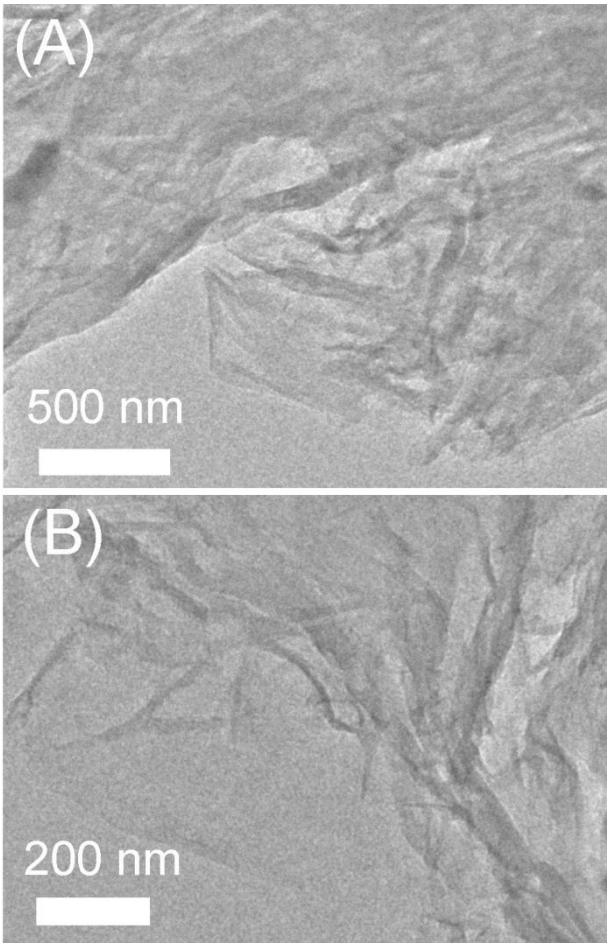

Figure S2. The TEM images of GO sheets.

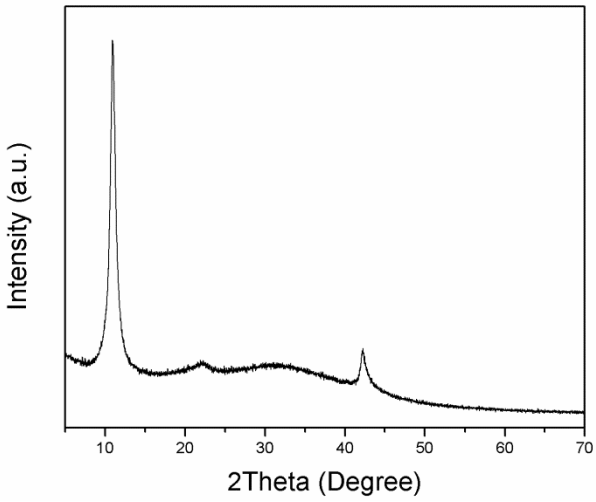

Figure S3. XRD pattern of as-prepared GO sample.

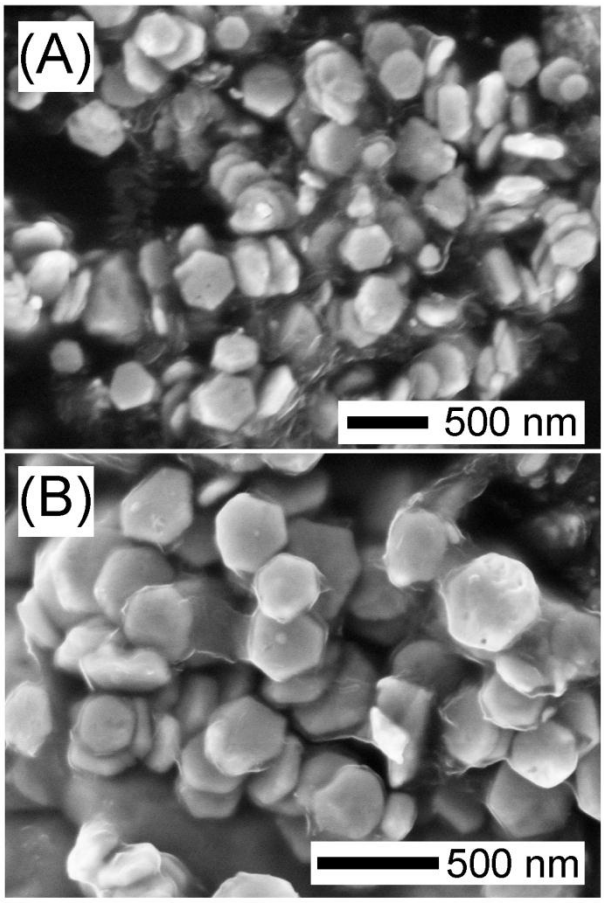

Figure S4. The SEM images of GO@AgBr hybrid nanosheets.

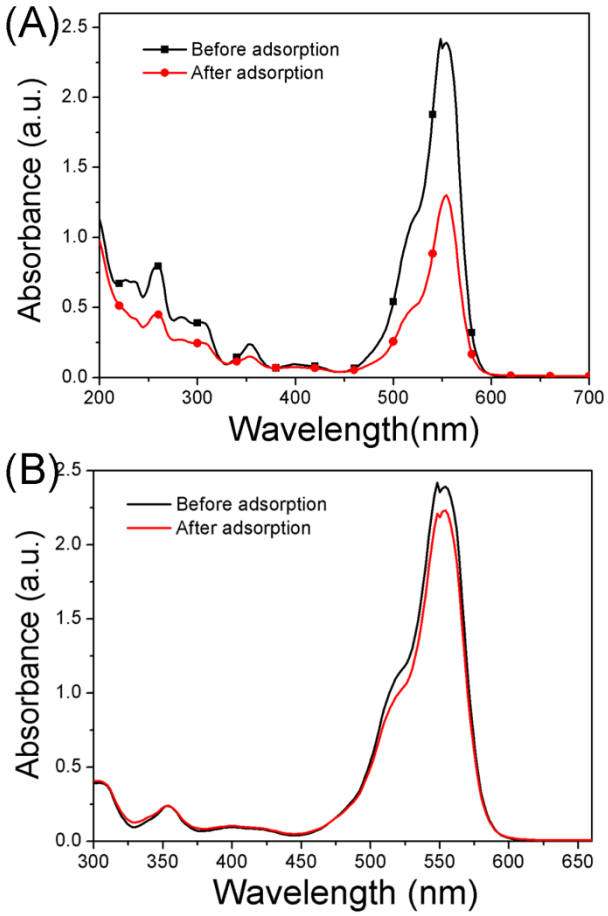

Figure S5. Absorption spectra of RhB solution before and after adsorption on (A) GO@AgBr nanocomposites and (B) bare AgBr nanosheets.

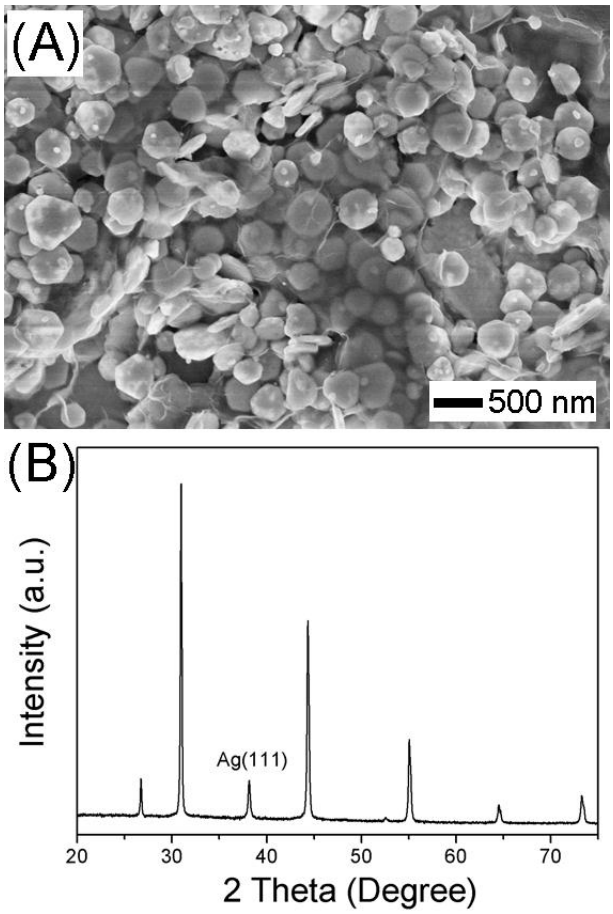

Figure S6. The SEM images (A) and XRD pattern (B) of GO@AgBr after repeated uses for the degradation of RhB solution.

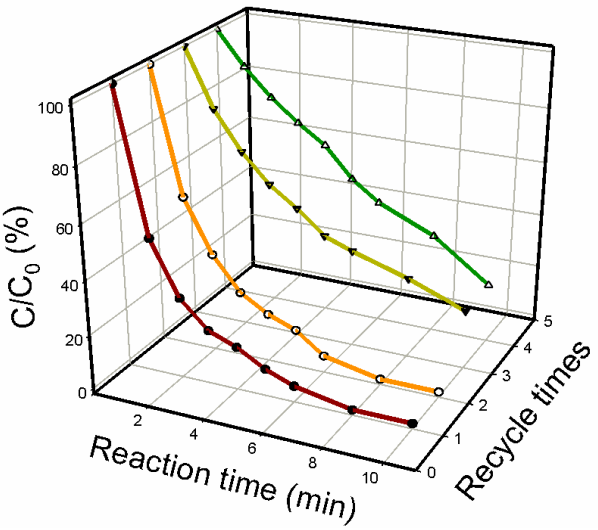

Figure S7. The degradation curves of RhB solution for 4 successive reactions catalyzed with the same batch of AgBr nanosheets under visible-light irradiation.