Electronic Supplementary Information for:

Heterostructured Ag_3PO_4/AgBr@Ag Plasmonic Photocatalyst with Enhanced Photocatalytic Activity and Stability under Visible Light

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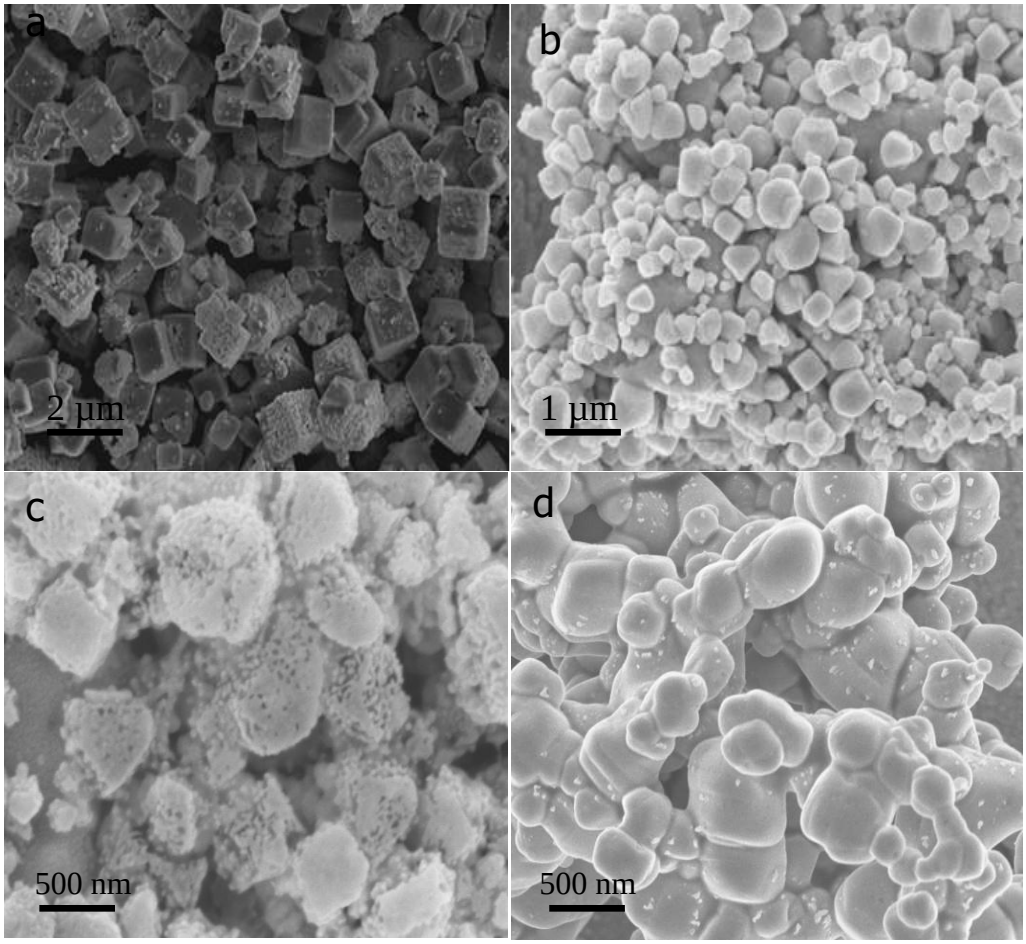

Figure S1. SEM images of the obtained Ag_3PO_4/AgBr/Ag using the different concentration of NaBr solution. (a) 0.3 mM, (b) 3 mM, (c) 30 mM, (d) 0.3 M.

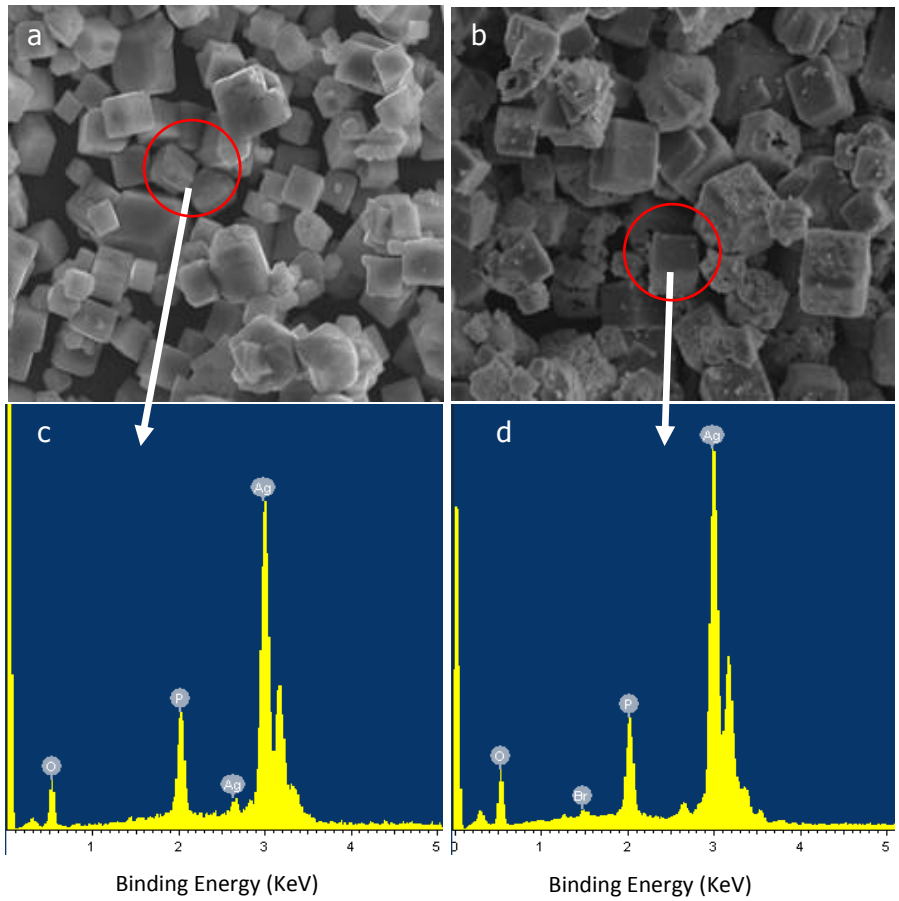

Figure S2 SEM images of the obtained Ag_3PO_4 (a) and Ag_3PO_4/AgBr/Ag (b) and corresponding EDS patterns of cubic Ag_3PO_4 crystals (c) and Ag_3PO_4/AgBr/Ag heterostructures (d) taken from a red circle.

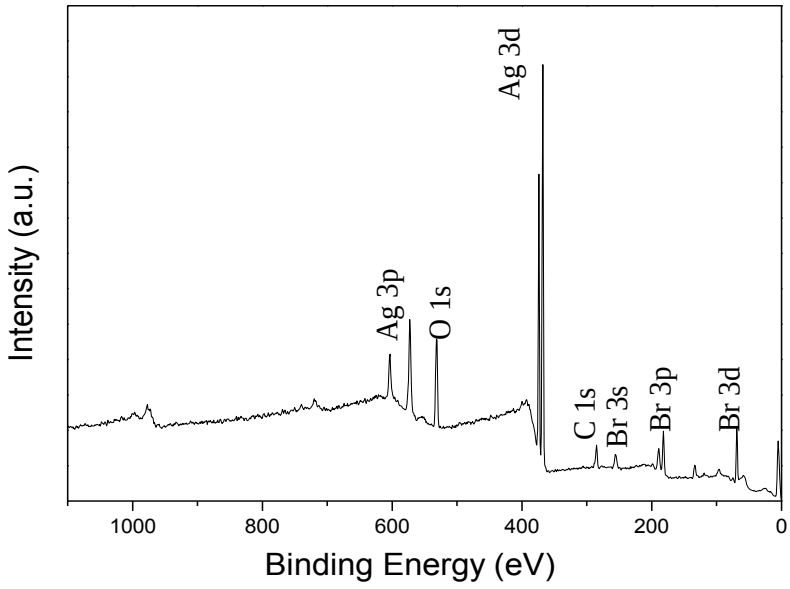

Figure S3 The survey XPS spectra of Ag_3PO_4/AgBr/Ag.

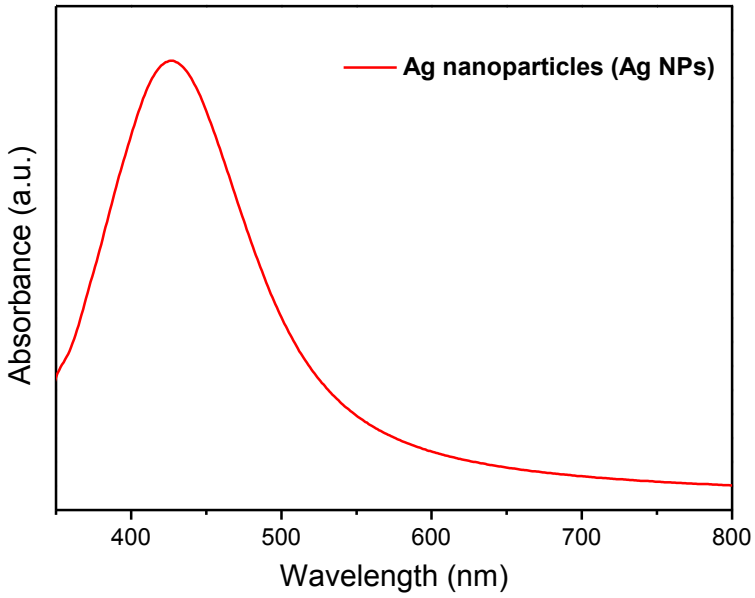

Figure S4 Typical UV-Vis spectrum of Ag nanoparticles.

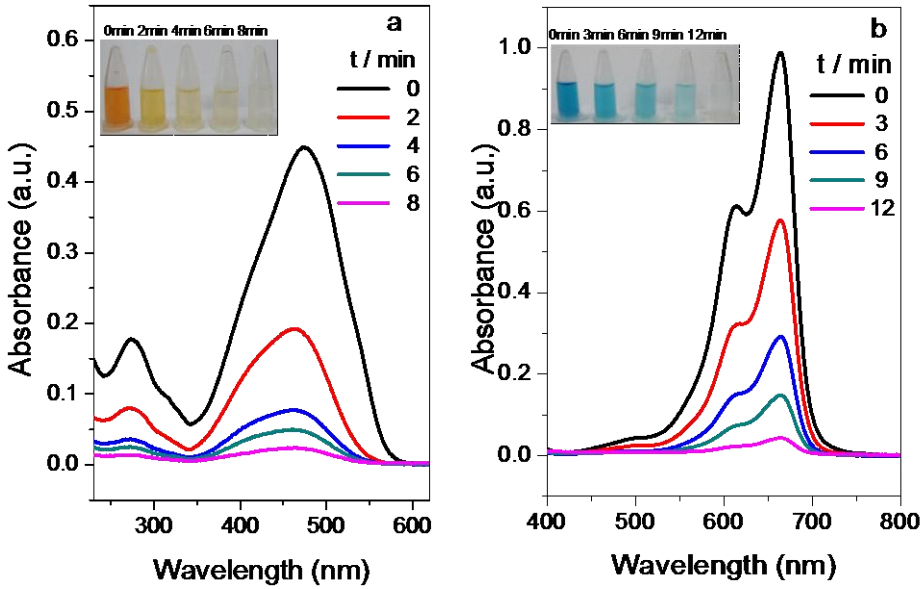

Figure S5 Typical UV-vis spectral changes of (a) MO and (b) MB aqueous solutions in the presence of Ag_3PO_4/AgBr/Ag heterostructures under visible-light irradiation.

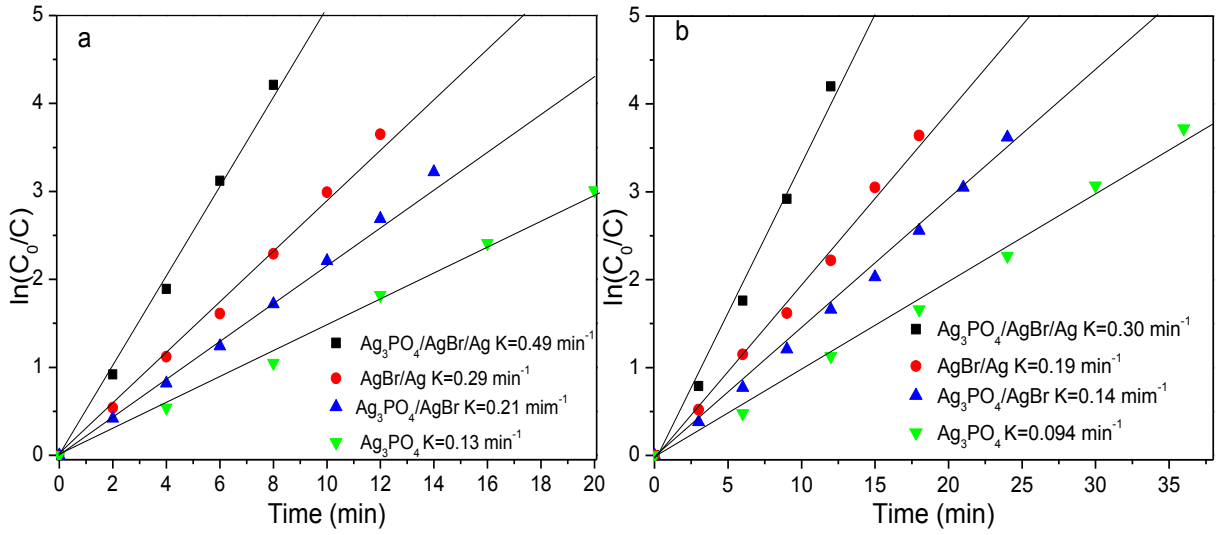

Figure S6 Photocatalytic degradation reaction kinetics of (a) MO and (b) MB over pure Ag_3PO_4, Ag_3PO_4/AgBr, AgBr/Ag, and Ag_3PO_4/AgBr/Ag, respectively.

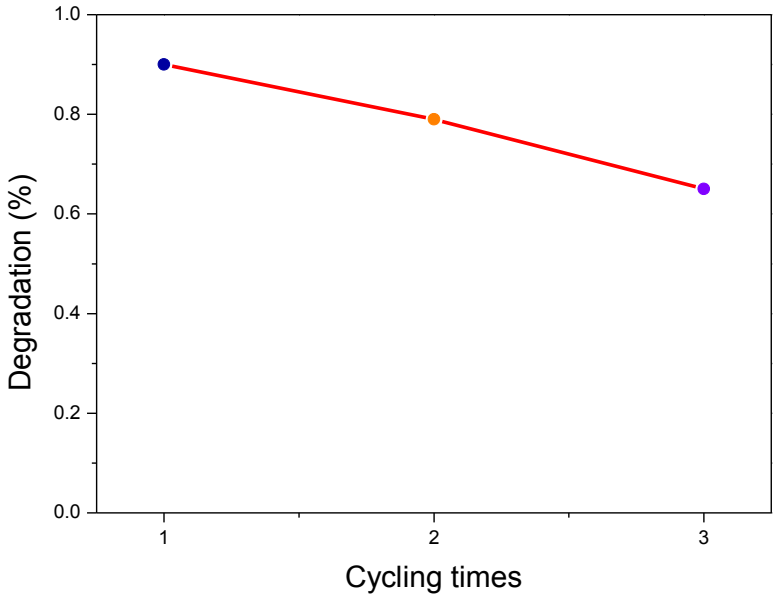

Figure S7 The cycling degradation efficiency for MO with cubic Ag_3PO_4 crystals under visible-light irradiation.