

Supplementary Materials

Silver nanoparticles modified reduced graphene oxide wrapped Ag₃PO₄/TiO₂ visible-light-active photocatalysts with superior performance

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Fig. S1

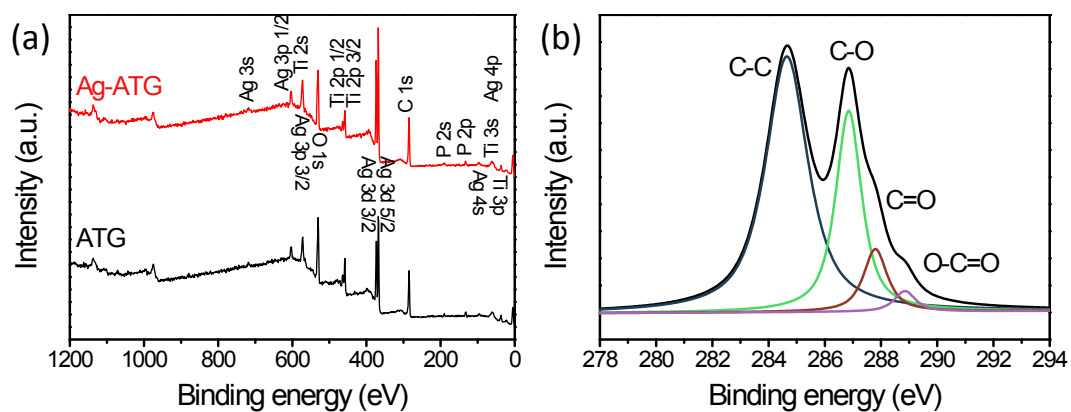


Fig. S1 (a) XPS survey spectrum of ATG and Ag-ATG photocatalysts, (b) high-resolution XPS spectra of C 1s of GO.

Fig. S2

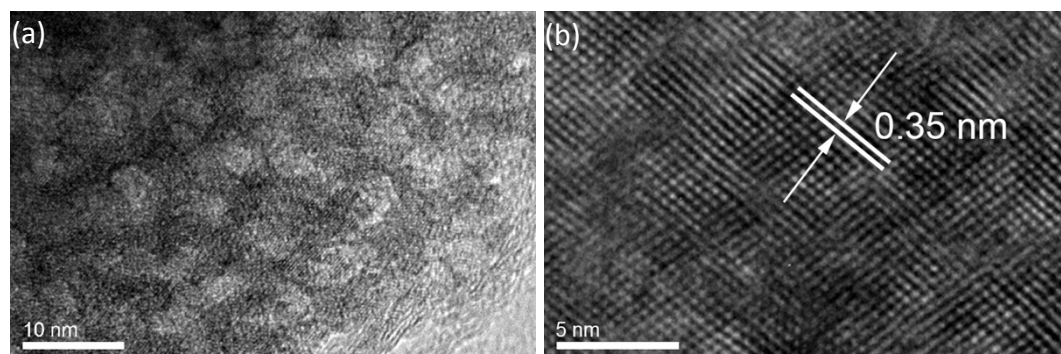


Fig. S2 (a) TEM and (b) HRTEM images of TG photocatalysts.

Fig. S3

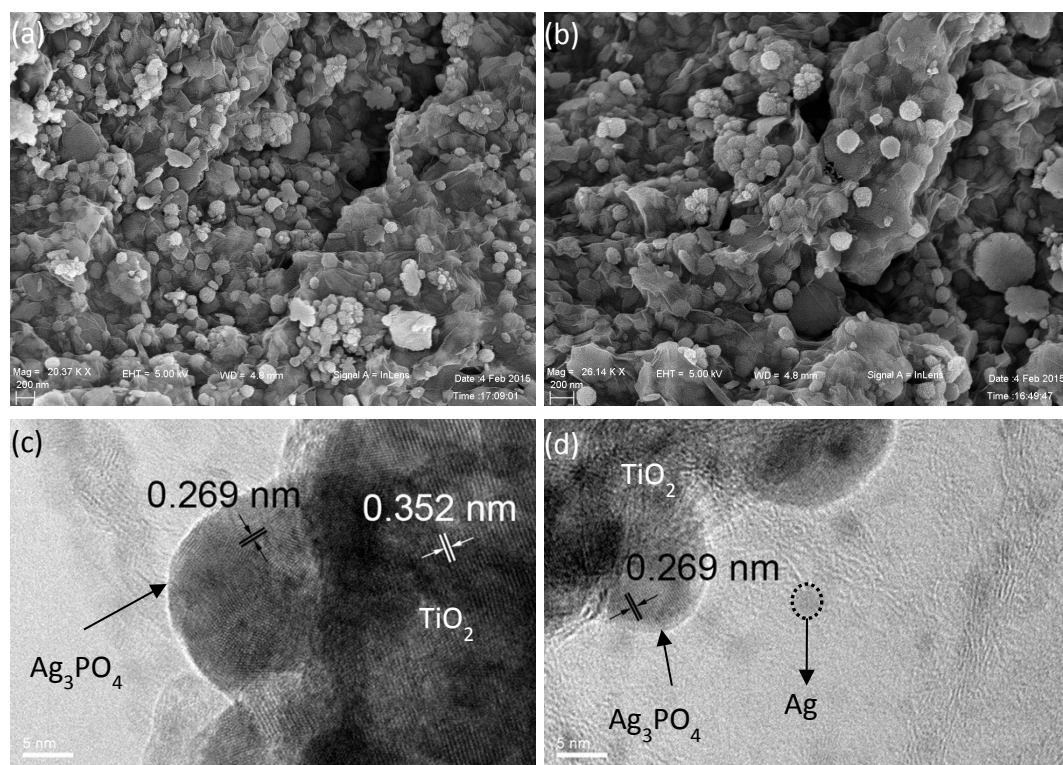


Fig. S3 SEM images of (a) ATG and (b) Ag-ATG photocatalysts, HRTEM images of (c) ATG and (d) Ag-ATG.

Fig. S4

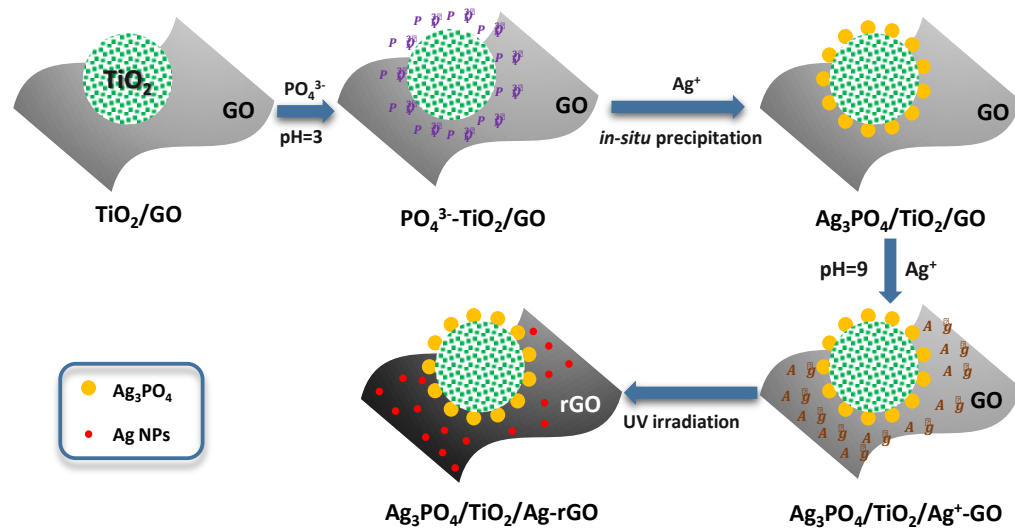


Fig. S4 The schematic illustration of the synthesis process of Ag-ATG.

Fig. S5

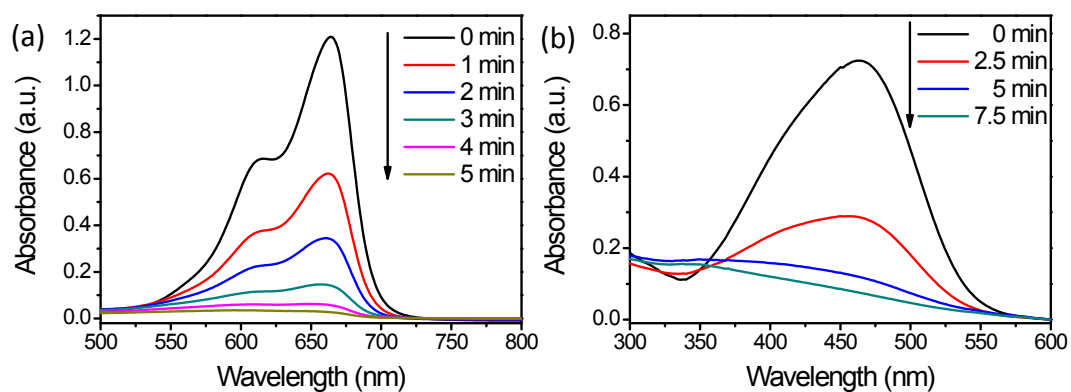


Fig. S5 UV-vis spectral changes of (a) MB and (b) MO aqueous solution in the presence of Ag-ATG photocatalysts under visible-light irradiation ($\lambda > 400$ nm). The slight blue-shifts in MO spectra might be ascribed to the existence of residual photocatalysts. The residual photocatalyst has slight influence on the spectral profile, but it has little influence on the evaluation of photocatalytic activity.

Fig. S6

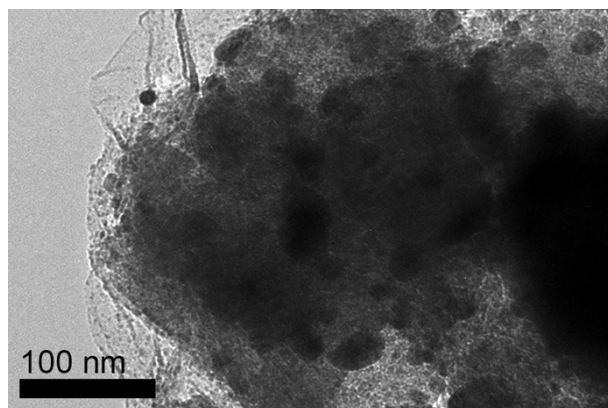


Fig. S6 TEM image of Ag-ATG-1.0 sample with excess Ag_3PO_4 . Compared with Ag-ATG-0.6, the Ag_3PO_4 NPs in Ag-ATG-1.0 are larger in size (about 50 nm) and are aggregated seriously.