Supporting Information

Inverse opal structured Ag/TiO_2 plasmonic photocatalyst prepared by pulsed current deposition and its enhanced visible light photocatalytic activity

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Summary: There are 4 pages including 4 figures

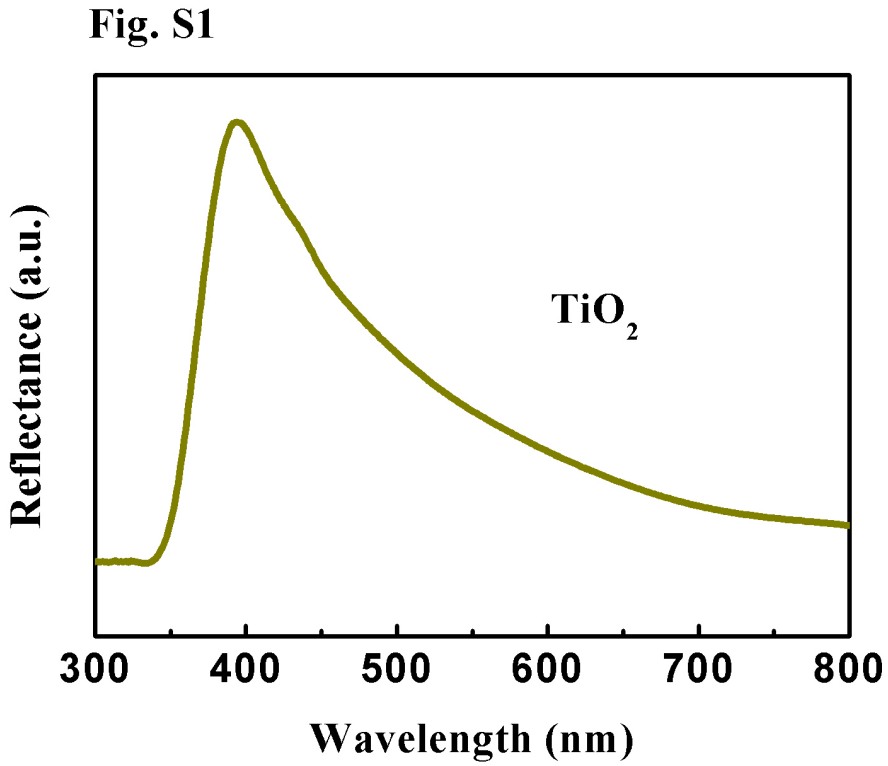

Figure S1. The reflectance spectrum of TiO_2 inverse opals.

Fig. S2

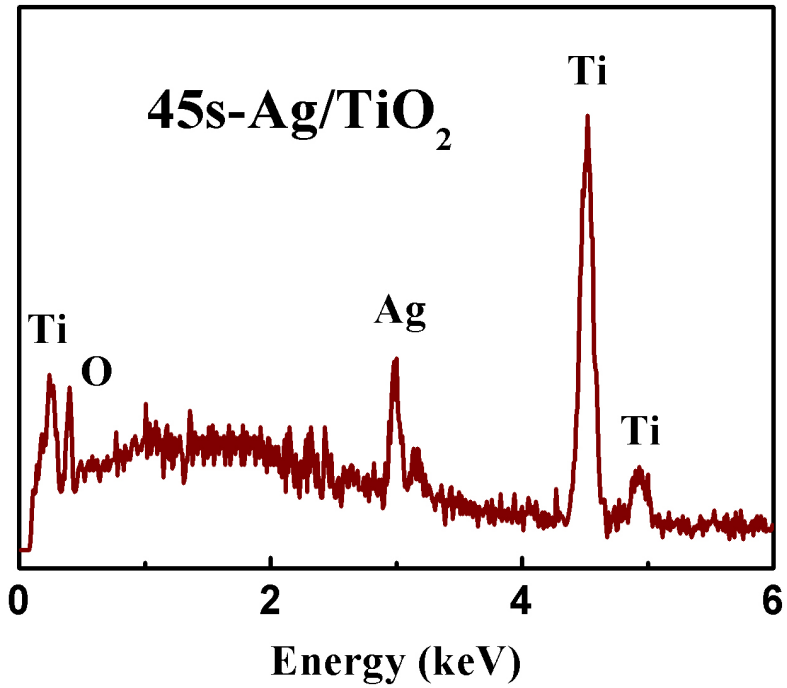

Figure S2. The EDX spectrum of the 45s-Ag/TiO_2 sample.

Fig. S3

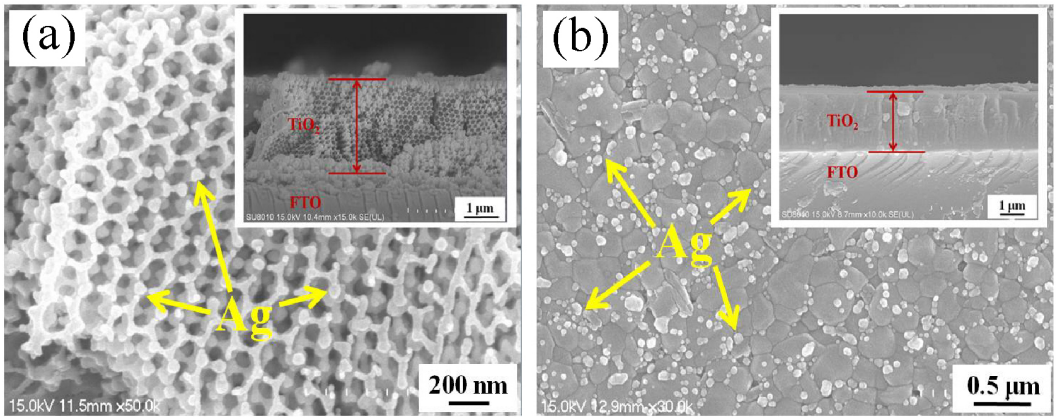

Figure S3. (a) and (b) show the SEM images of the disordered porous Ag/TiO_2 and the Ag/TiO_2 films (top view and cross-section view). The disordered porous TiO_2 structure was prepared from a randomly packed template formed with a mixture of 225 and 260 nm PS spheres under the same conditions as the inverse opals. The TiO_2 films were fabricated by spin coating using the same precursor.

Fig. S4

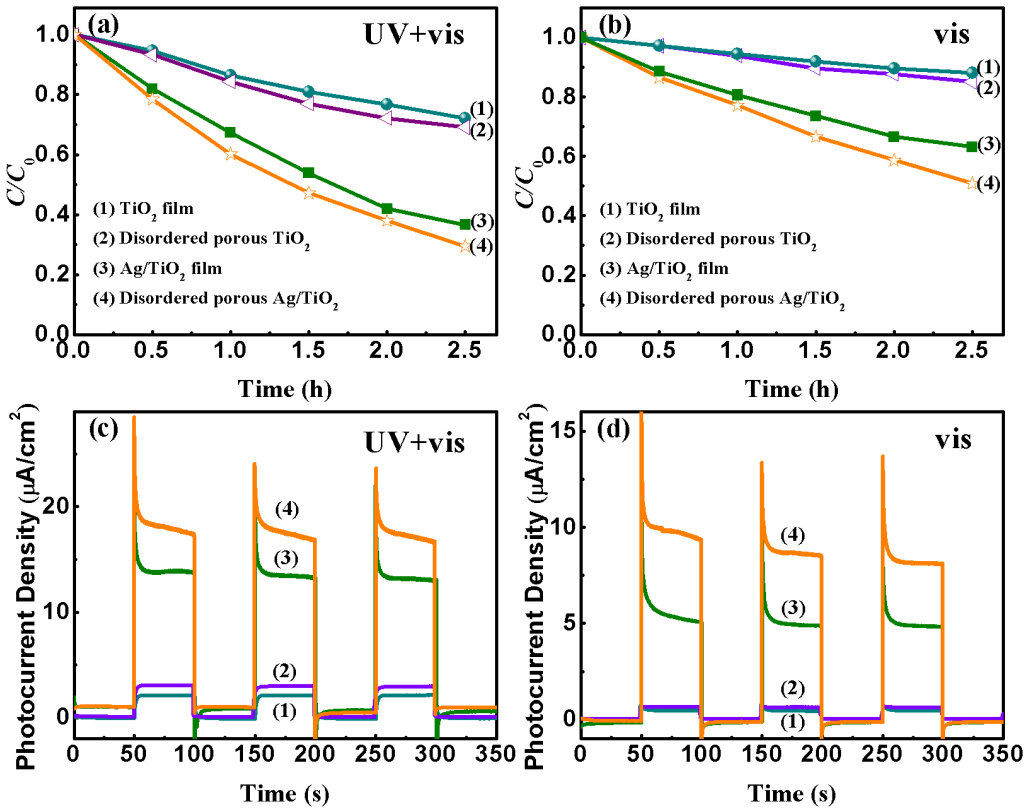

Figure S4. (a) Photocatalytic degradation efficiencies of MB using the disordered porous Ag/TiO_2 and Ag/TiO_2 films under UV-visible light illumination; (b) Photocatalytic degradation efficiencies of RhB using the disordered porous Ag/TiO_2 and Ag/TiO_2 films under visible light illumination; (c) Photocurrent densities vs time for the corresponding samples at under UV-visible light illumination; (d) Photocurrent densities vs time for the corresponding samples at under visible light illumination.