Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Supplementary information

Ag synchronously deposited and doped TiO_2 hybrid as ultrasensitive SERS substrate: A multi-function platform for SERS detection and photocatalytic degradation

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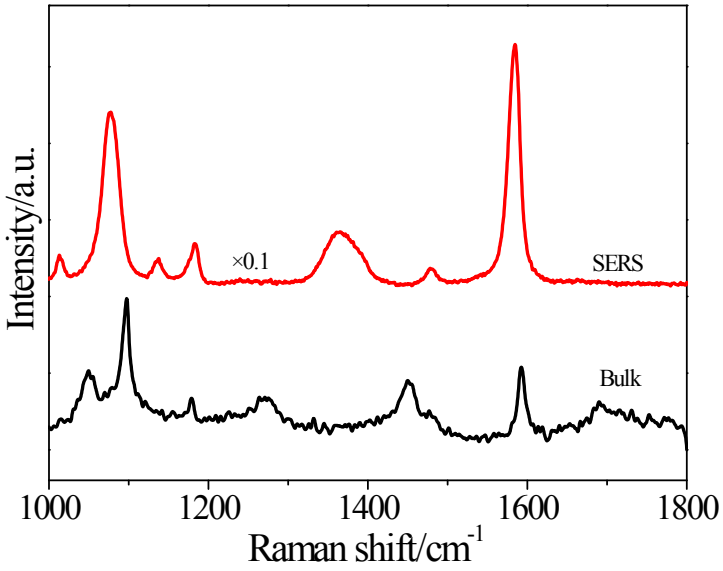

Fig. S1 Normal Raman spectrum (Bulk) of 1.0 mol/L of 4-MBA ethanol solution and SERS spectrum of 4-MBA adsorbed on Ag-TiO_2 from 1×10^{-3} mol/L of 4-MBA ethanol solution.

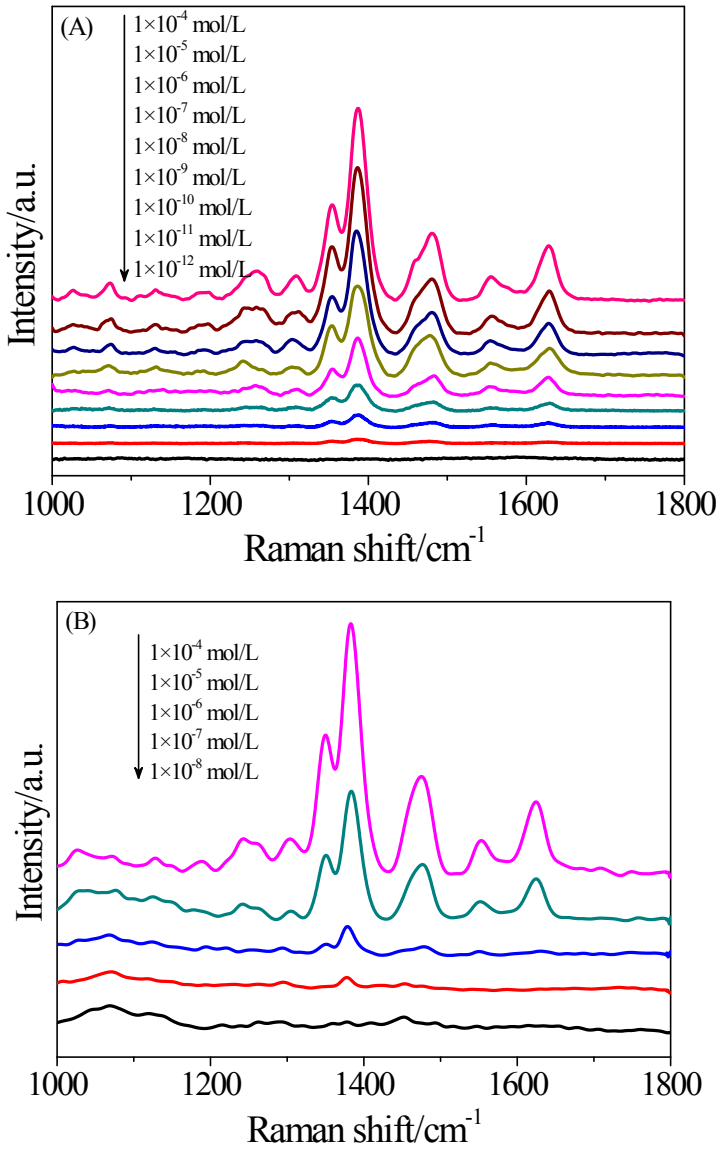

Fig. S2 SERS spectra of CIP adsorbed on Ag-TiO_2 (A) and pure TiO_2 (B) substrates from different concentrations of CIP aqueous solution.

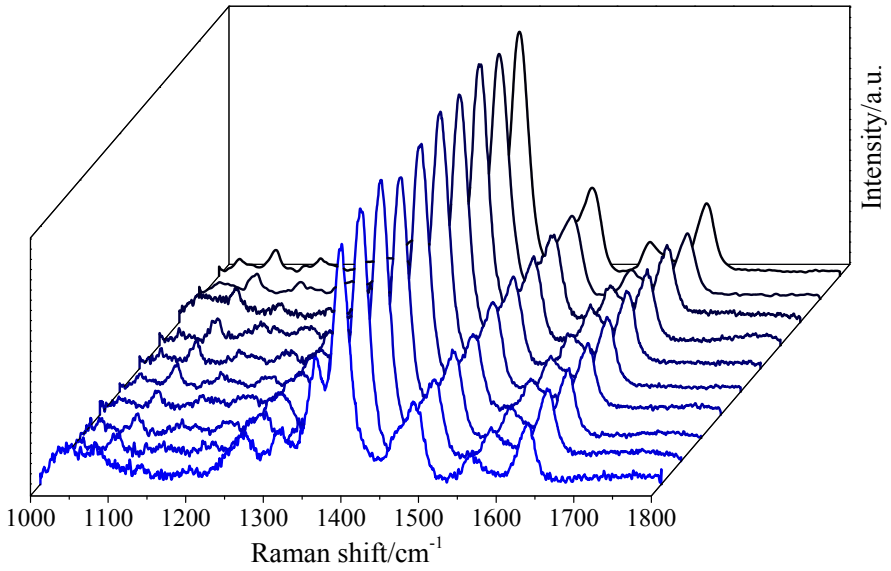

Fig. S3 SERS spectra of CIP adsorbed on Ag-TiO_2 from 10 randomly selected points.

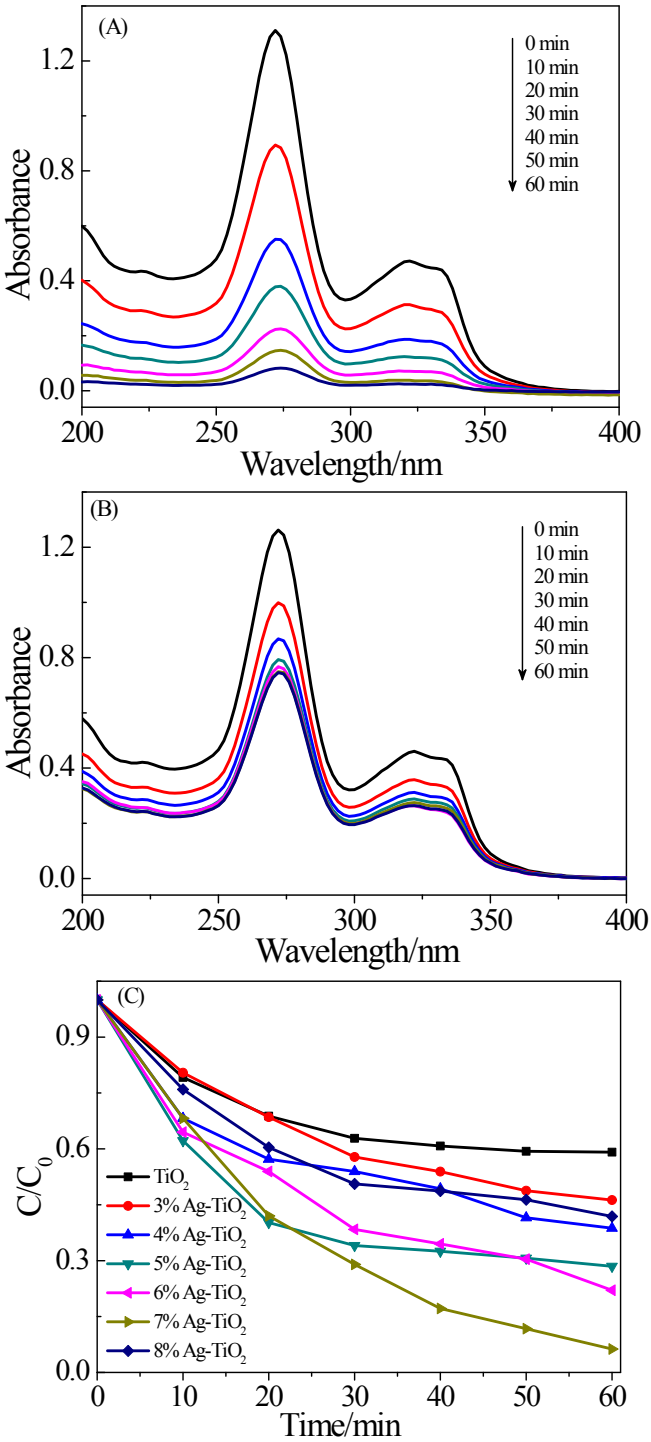

Fig. S4 UV-visible spectra of CIP aqueous solutions after the photocatalytic degradation with different UV-light irradiation times on 7%Ag-TiO_2 (A) and pure TiO_2 (B) and the plot of C/C_0 versus time on different photocatalysts (C).