

**High photocatalytic activity of plasmonic Ag@AgCl/Zn₂SnO₄
nanocomposites synthesized using hydrothermal method**

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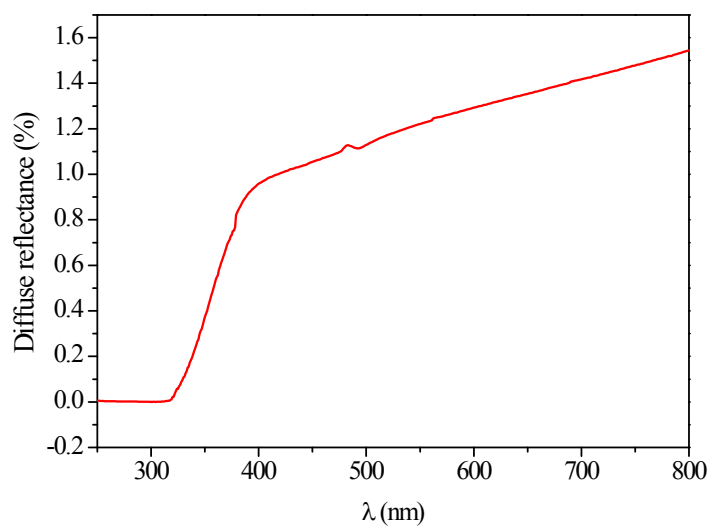


Figure S1. Diffuse reflectance of ZTO NPs.

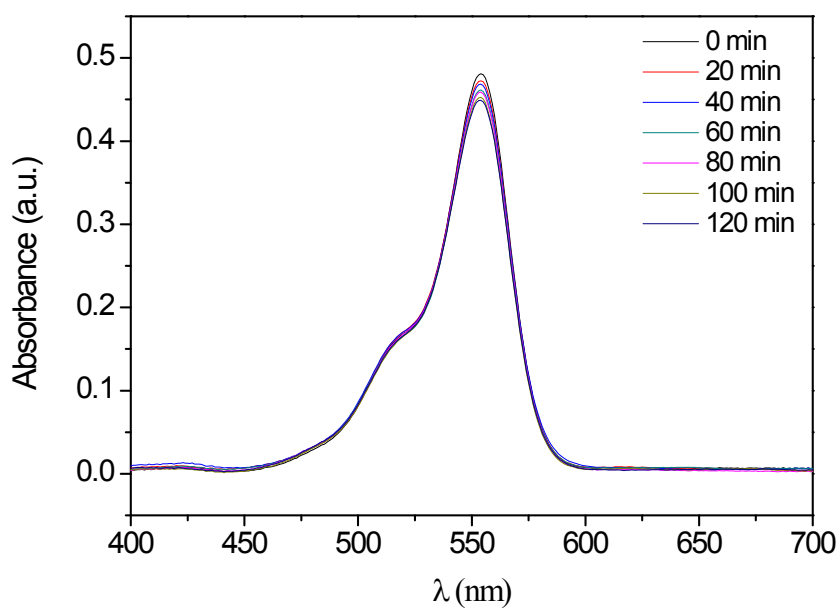


Figure S2. UV-vis absorption spectra of RhB (5×10^{-6} M) before and after irradiation in the absence of catalyst as a function of irradiation time under visible light irradiation ($\lambda_{\text{ex}} > 420$ nm, $P = 0.5$ W).

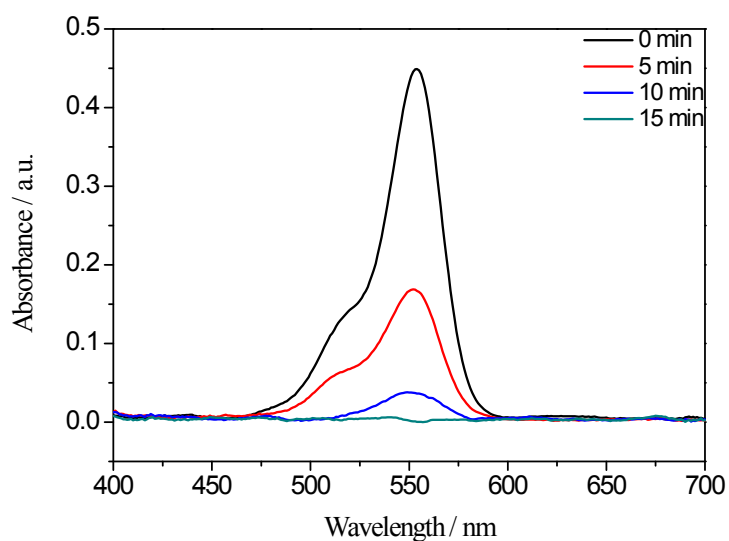


Figure S3. UV-vis absorption spectra of RhB(5×10^{-6} M) before and after irradiation in the presence of Z-Ag2 (1g/L) sample as a function of irradiation time under visiblelight irradiation ($\lambda_{\text{ex}} > 420$ nm, P=0.5 W).

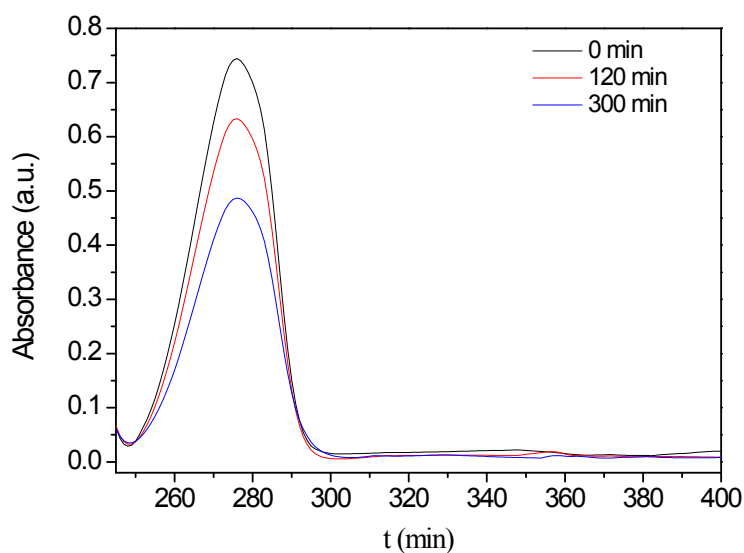


Figure S4. UV-vis absorption spectra of Bisphenol A (0.3 mM) before and after irradiation in the presence of Z-Ag2 (1g/L) sample as a function of irradiation time under visible light irradiation ($\lambda_{\text{ex}} > 420$ nm, P=0.5 W).

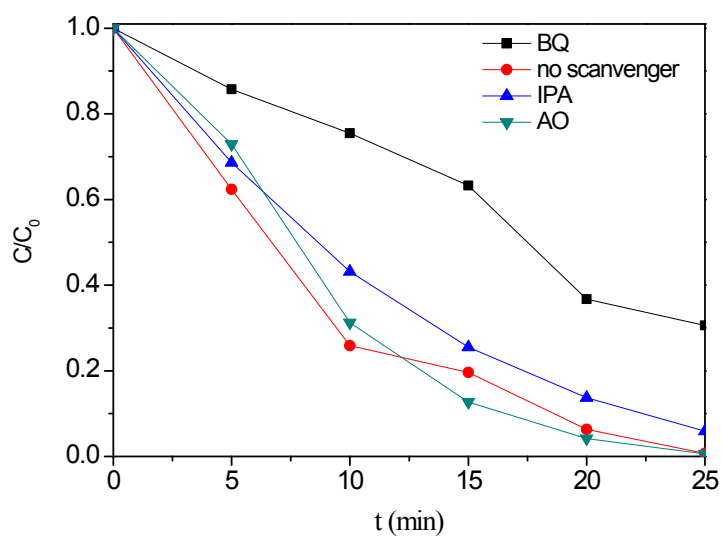


Figure S5. Photocatalytic degradation of RhB over Ag@AgCl/ZTO (Z-Ag₂, 1g/L) alone and in the presence of OA, IPA and BQ scavengers under visible light.