

Supporting Information

One-pot Synthesis of Ag/r-GO/TiO₂ Nanocomposites with High Solar Absorption and Enhanced Anti-Recombination in Photocatalytic Applications

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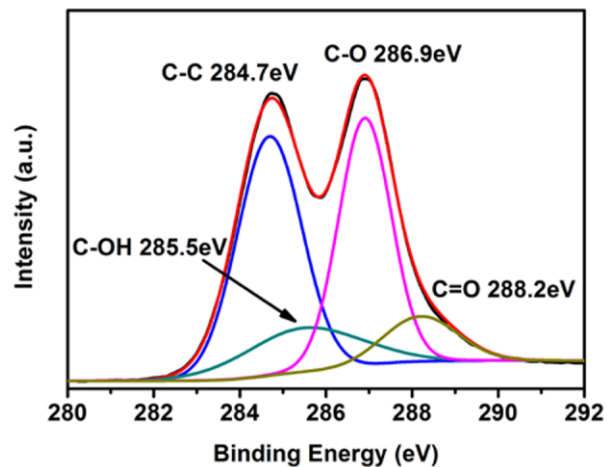


Figure S1 C1s XPS spectrum of GO.

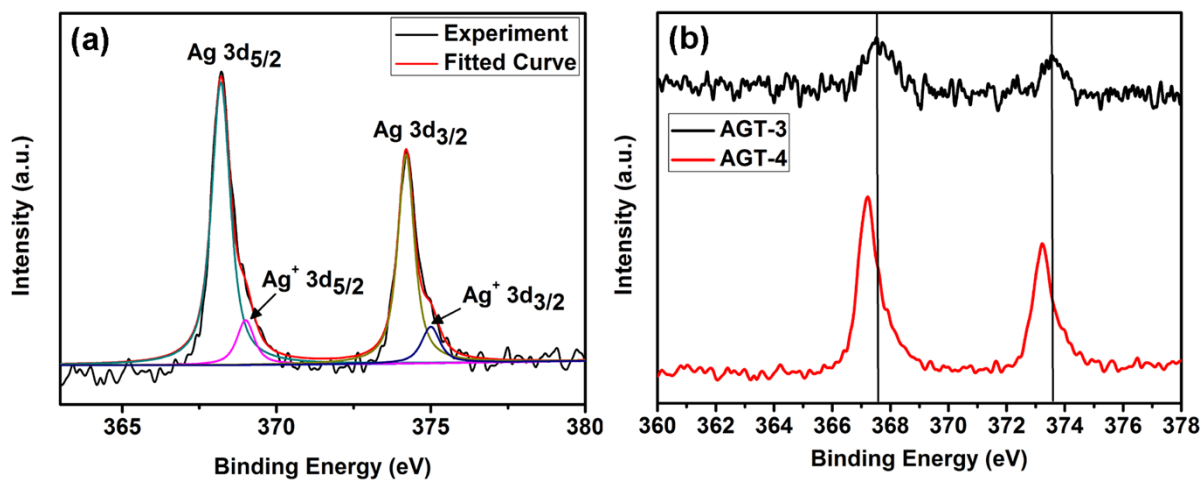


Figure S2 (a) Core level XPS spectra of Ag 3d pattern of AGT-4. (b) The comparison of Ag 3d pattern of AGT-3 and AGT-4 showing a red shift as the increased Ag content.

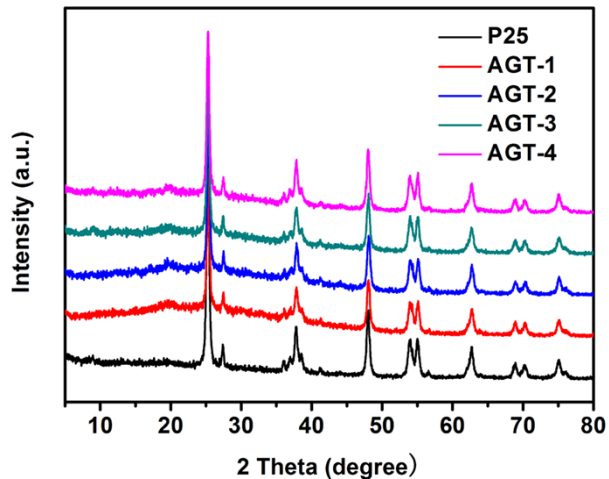


Figure S3 XRD patterns of P25 and AGT composites with different AgNO₃ content.

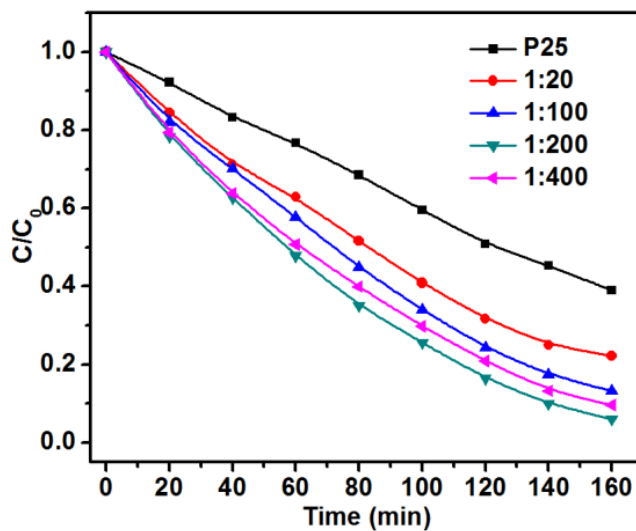


Figure S4 Photocatalytic degradation of RhB under the simulated sun light over P25 and r-GO/TiO₂ composites with different P25 content.

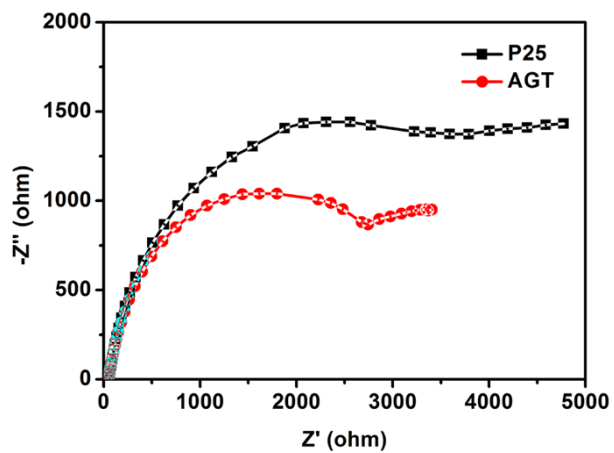


Figure S5 EIS changes of P25 and AGT electrodes. The EIS measurements were performed in the presence of a 2.5 mM $K_3[Fe(CN)_6]/K_4[Fe(CN)_6]$ (1:1) mixture as a redox probe in 0.1 M KCl aqueous solution.

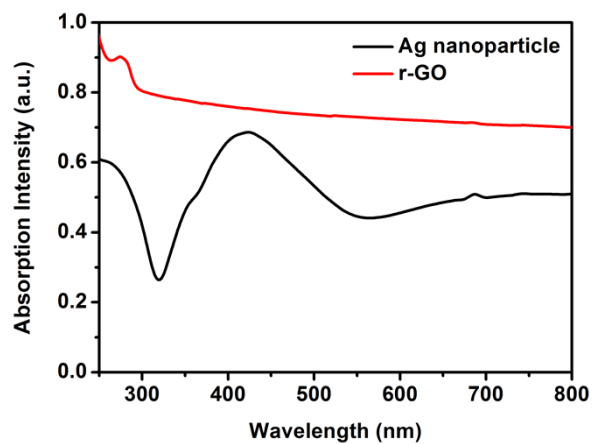


Figure S6 The absorption spectra of pure Ag nanoparticles and pure r-GO.

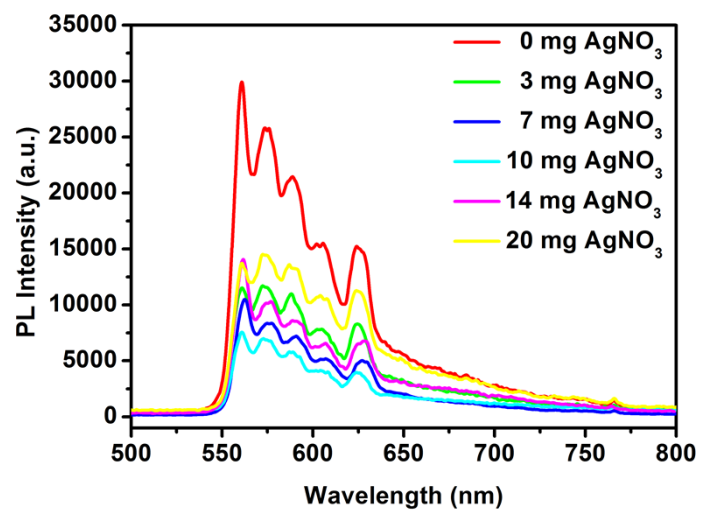


Figure S7 Photoluminescence spectra of AGT composites with different AgNO_3 content.