Electronic Supplementary Material (ESI) for Catalysis Science & Technology

Supplementary Information

Graphene Oxide Enwrapped Ag_3PO_4 Composite: Towards a Highly Efficient and Stable Visible-Light-Induced Photocatalyst for Water Purification

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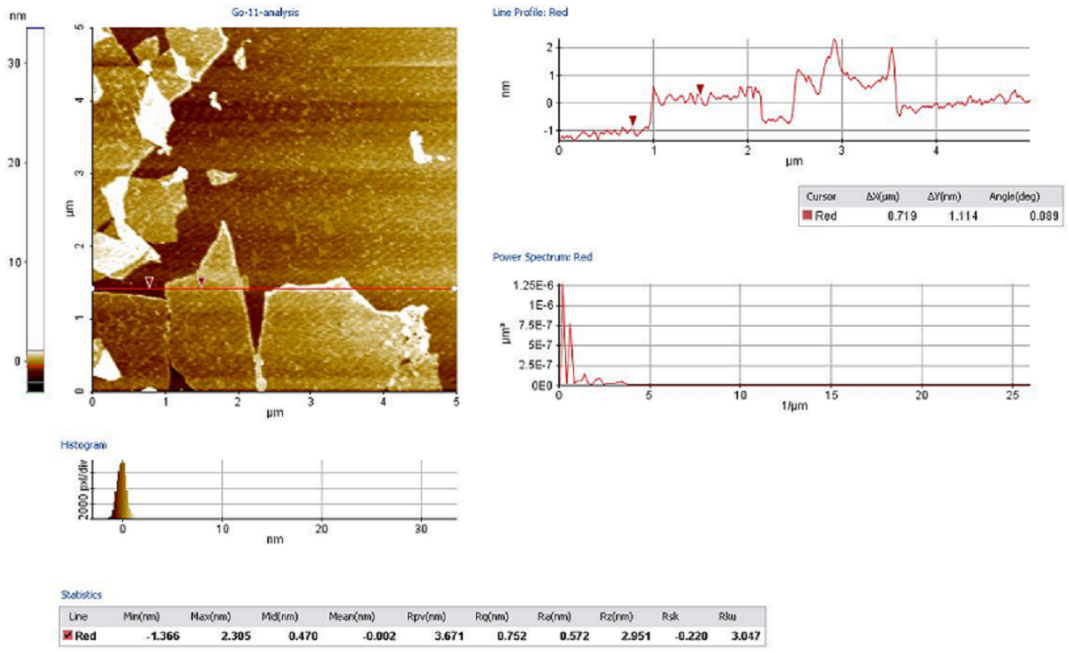
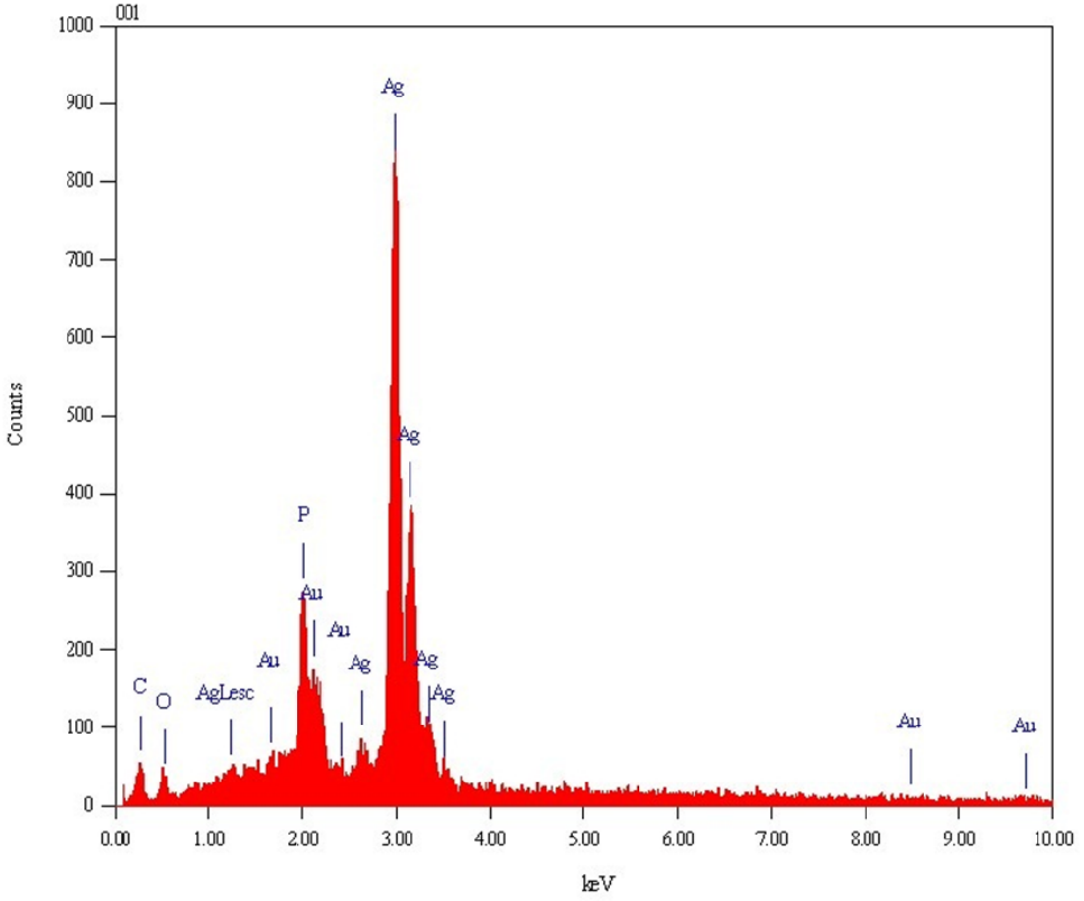


Fig. S1: AFM image of single-sheet graphene oxide.



Element	Mass%	Error%	At%
C K	10.02	0.02	30.97
O K	17.58	0.12	40.76
P K	5.37	0.05	6.43
Ag L	59.41	0.16	20.4
Au M	7.62	0.20	1.44
Total	100		100

Fig. S2: EDS spectra and element contents of GO-Ag_3PO_4 composite. The Au peaks in the spectra are because of Au coating for sample preparation.

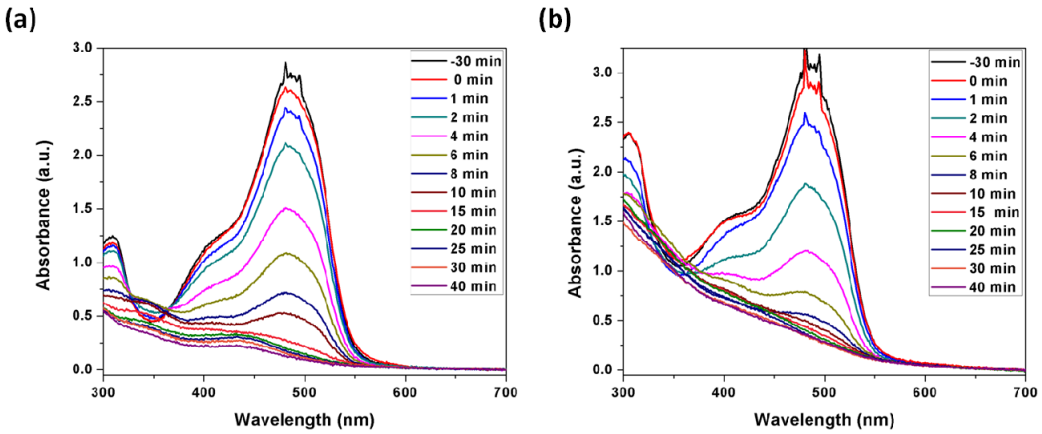


Fig. S3: Typical real-time absorption spectra of AO7 dye during the photodegradation process over bare Ag_3PO_4 (a), GO-Ag_3PO_4 composite (b) under visible-light irradiation. The black curves marked as -30 min is the absorption spectra detected from the original AO7 solution before the dark adsorption experiment.

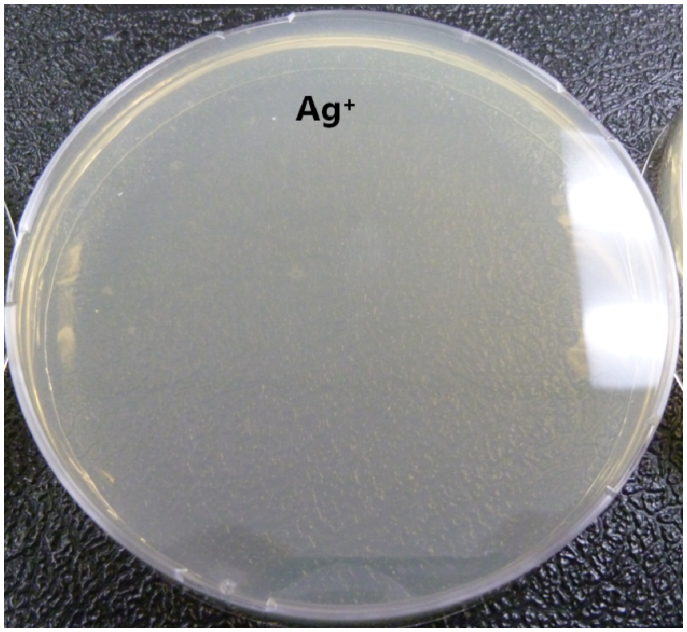


Fig. S4: Image of *E.coli* colonies on an agar plate incubated with Ag^+. (Ag^+ concentration: 4.5 ppm, initial bacterial concentration: ~10^7 cfu/mL)