

Electronic Supporting Information (ESI)

Controllable fabrication of Ag₂WO₄ nanorod-clusters with outstanding simulated sunlight photocatalytic activity

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Table S1. The series of Ag_2WO_4 samples prepared with different molar ratio of AgNO_3 and Na_2WO_4 .

AgNO_3 dosage (mmol)	Na_2WO_4 dosage (mmol)	Molar ratio	Sample name	Yield (%)
1.0	0.25	1:0.25	AWO-1:0.25	75.9
1.0	0.5	1:0.5	AWO-1:0.5	79.6
1.0	2.0	1:2	AWO-1:2	92.3
1.0	4.0	1:4	AWO-1:4	93.2
1.0	5.0	1:5	AWO-1:5	94.1

Table S2. The medium pH of the reaction precursor with different reactant molar ratio

Sample	AWO-1:0.25	AWO-1:0.5	AWO-1:2	AWO-1:4	AWO-1:5
medium pH	7.49	7.61	9.40	9.81	9.83

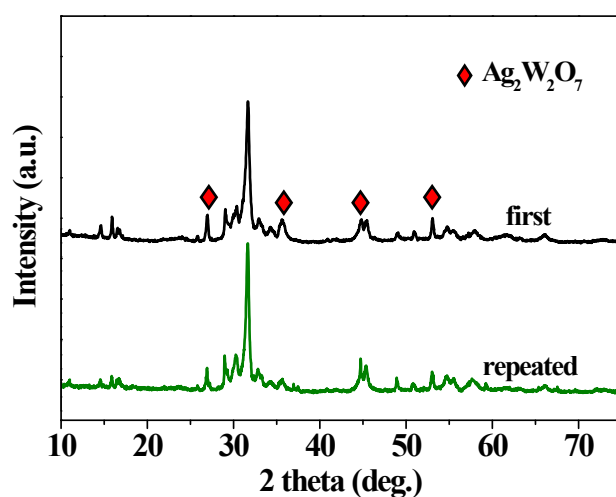


Fig. S1 XRD patterns of the AWO-1:0.5 samples obtained by stoichiometric AgNO_3 and Na_2WO_4 .

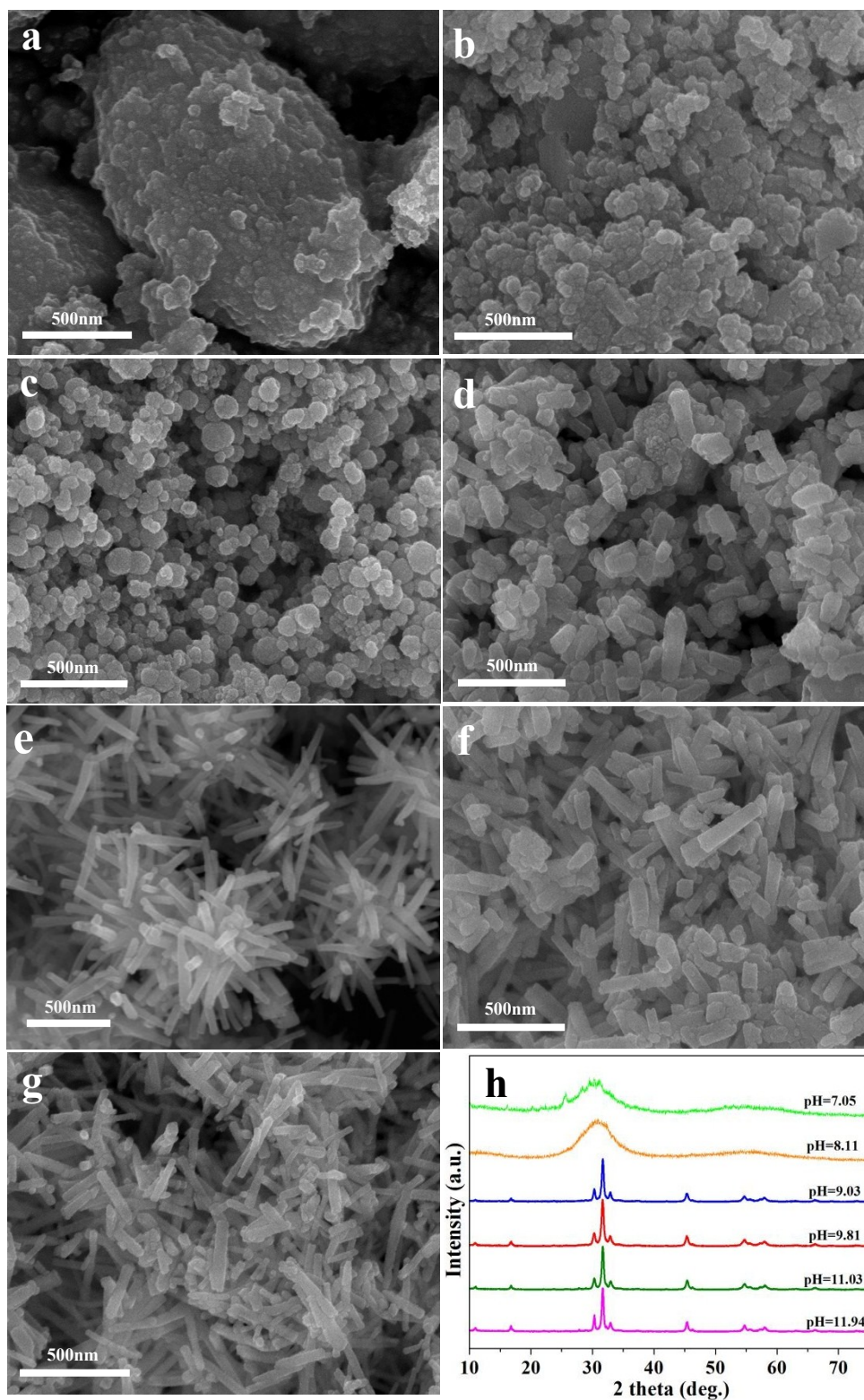


Fig. S2 SEM images of the different pH series samples based on AWO-1:4: (a) pH = 6.06, (b) pH = 7.05, (c) pH = 8.11, (d) pH = 9.03, (e) pH = 9.81, (f) pH = 11.03, (g) pH = 11.94, and (h) the corresponding XRD patterns.

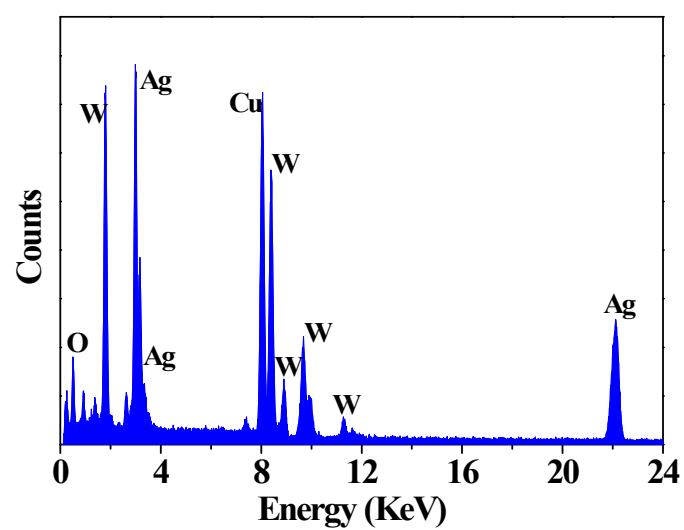


Fig. S3 EDS patterns of the AWO-1:4 sample.

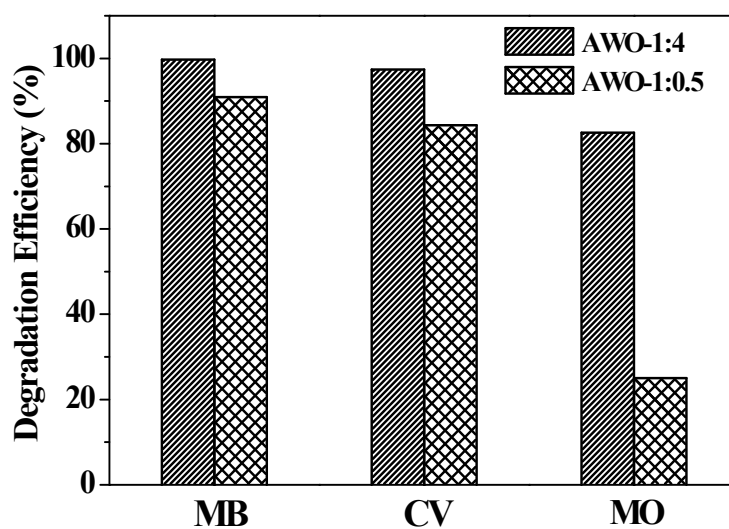


Fig. S4 comparison of photodegradation for different dyes after 50 min illumination.

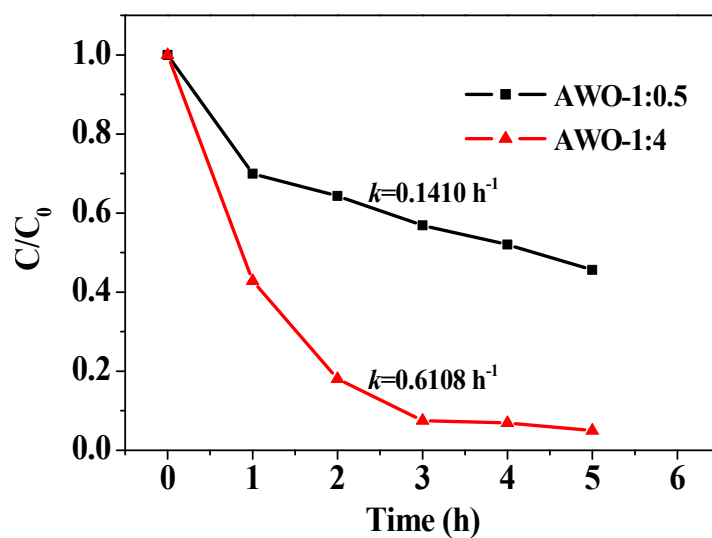


Fig. S5 Photocatalytic degradation of phenol over AWO-1:4 and AWO-1:0.5.

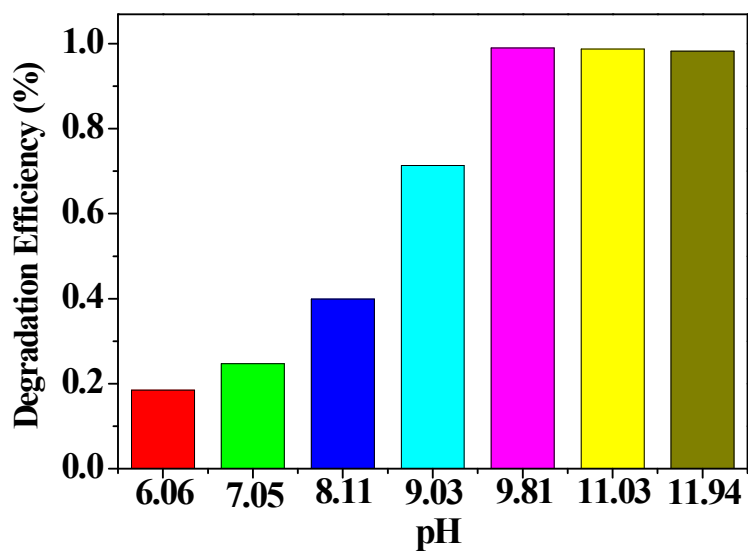


Fig. S6 Photocatalytic behavior of pH series samples for degradation of RhB solution after 50 min illumination.

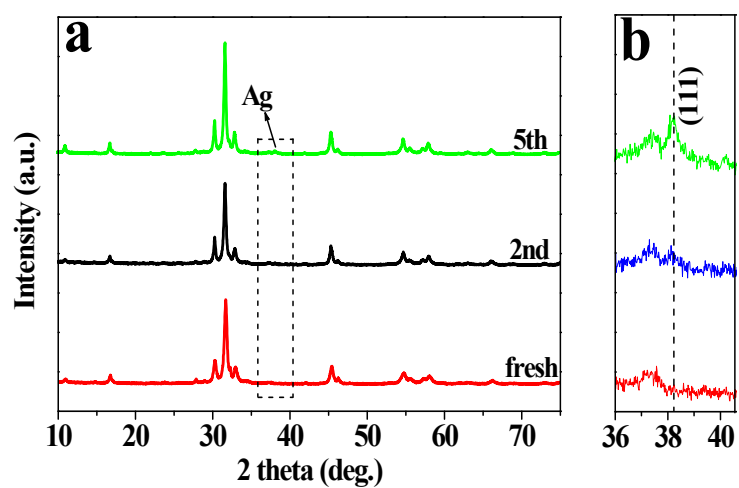


Fig. S7 (a) XRD patterns of the AWO-1:4 sample before and after repeated photocatalytic experiments; (b) enlarged diffractions positions of Ag phase.