

Supplementary information

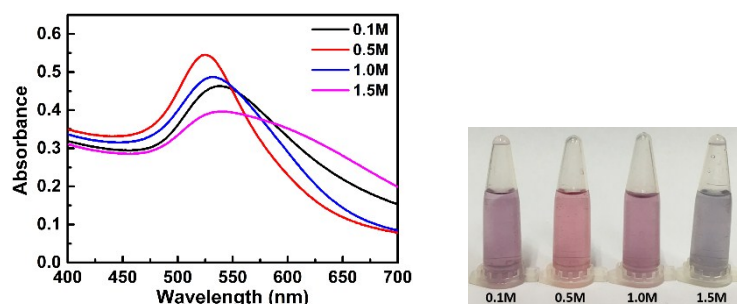


Fig.S1 UV-vis spectra and photographs of Au NPs synthesized in sucrose solutions of different concentrations at 20 min. (25 μ L of 0.1 M chloroauric acid solution was added in 25 mL of boiling sucrose solution after the hydrolysis time of 10 min)

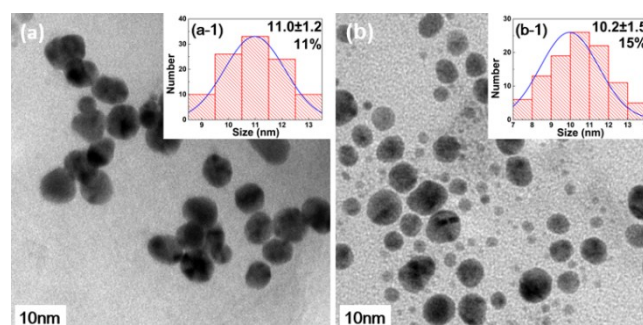


Fig. S2 TEM images and size histograms (insets) of Au (a) and Ag (b) NPs synthesized in 0.5 M sucrose solution at 20 min. The average size of Ag NPs was obtained by the statistical calculation of NPs not smaller than 7 nm.

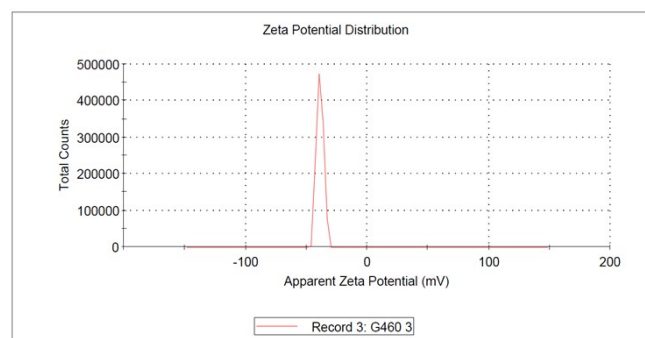


Fig.S3 Zeta potential distribution of Au-Ag alloy NPs suspension synthesized in 0.5 M sucrose solution.

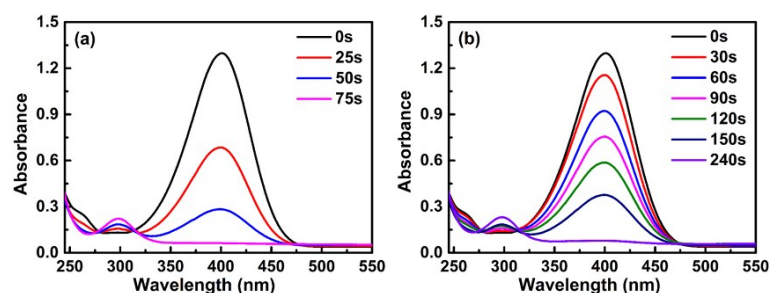


Fig. S4 UV-vis absorption spectra for the reduction of 4-NP solution using 500 μ L of 0.1 mM Au (a) and Ag (b) NPs hydrosols as photocatalysts, respectively.