

Supporting information

Fig. S1. Effect of $[\text{Ag}^+]$ on the SRP absorbance of Ag@Cu bimetallic nanoparticles.

Reaction conditions: $[\text{cysteine}] = 10.0 \times 10^{-4} \text{ mol dm}^{-3}$, $[\text{CTAB}] = 10.0 \times 10^{-4} \text{ mol dm}^{-3}$, $[\text{Cu}^{2+}] = 10.0 \times 10^{-4} \text{ mol dm}^{-3}$.

Fig. S2. Time resolved UV-visible spectra of Ag/Cu nanocomposites. *Reaction*

conditions: $[\text{cystine}] = 10.0 \times 10^{-4} \text{ mol dm}^{-3}$, $[\text{Cu}^{2+}] = 10.0 \times 10^{-3} \text{ mol dm}^{-3}$, $[\text{CTAB}] = 10.0 \times 10^{-4} \text{ mol dm}^{-3}$, $[\text{Ag}^+] = 20.0 \times 10^{-4} \text{ mol dm}^{-3}$.

Fig. S3. Effect of $[\text{cysteine}]$ on the SRP absorbance of Ag@Cu (●) and CTAB-capped

Ag@Cu (○) bimetallic nanoparticles. *Reaction conditions:* $[\text{Ag}^+] = 20.0 \times 10^{-4} \text{ mol dm}^{-3}$, $[\text{CTAB}] = 10.0 \times 10^{-4} \text{ mol dm}^{-3}$, $[\text{Cu}^{2+}] = 10.0 \times 10^{-4} \text{ mol dm}^{-3}$.

Fig. S1.

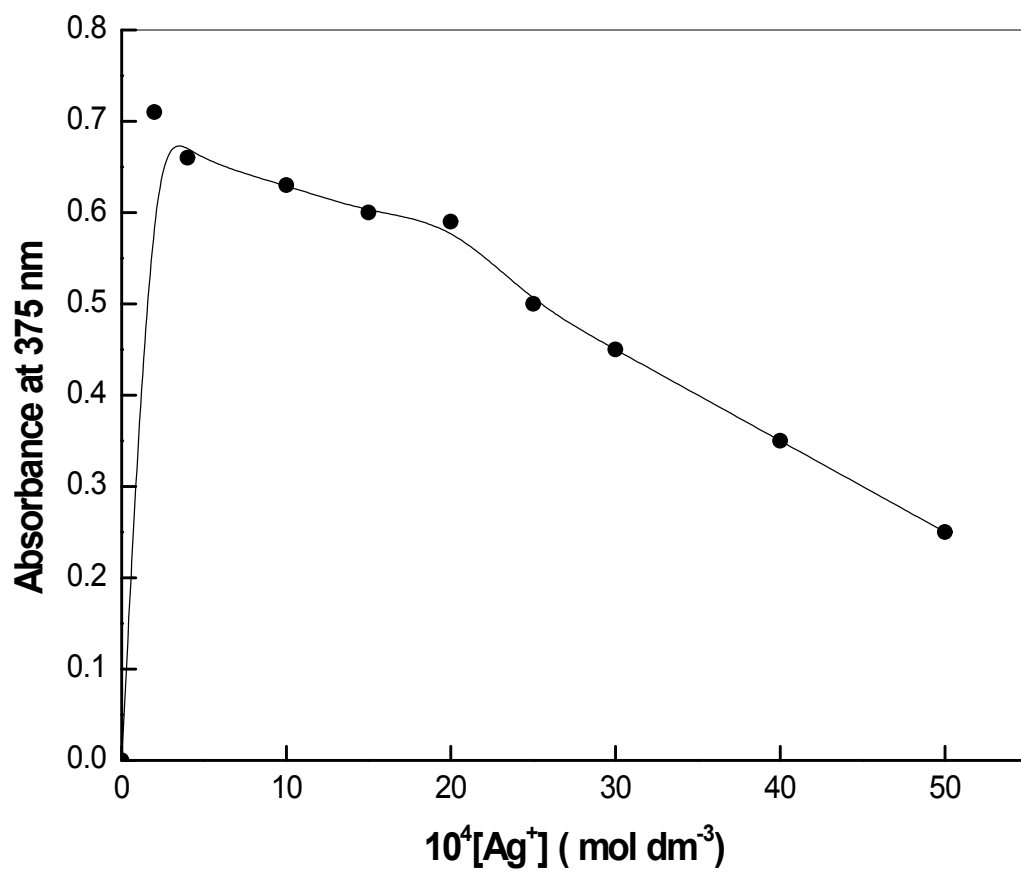


Fig. S2.

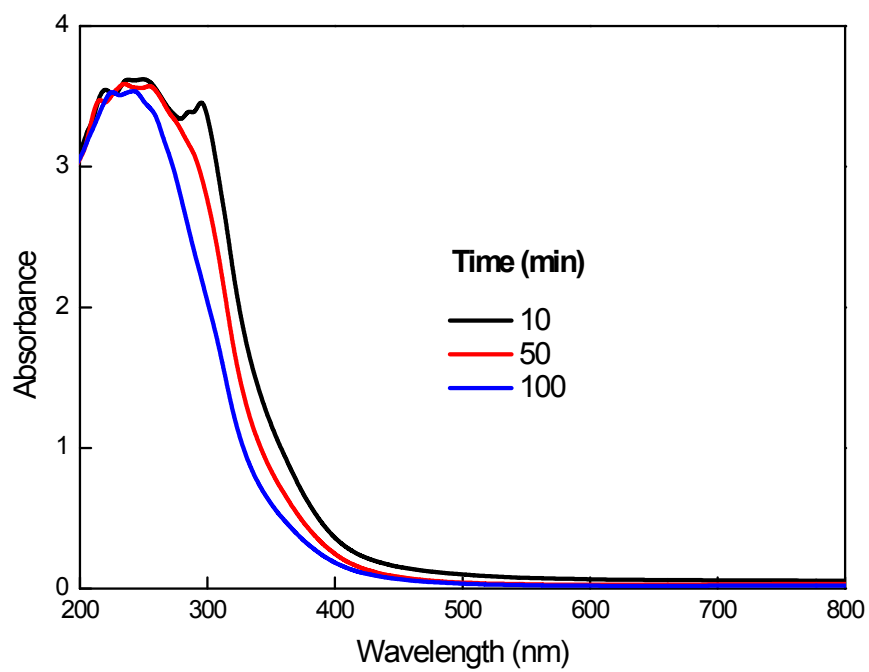


Fig. S3.

