

Electronic Supplementary Material

Citrate capped silver nanoparticles as instantaneous colorimetric selective sensor for neomycin and thiamine in wastewater

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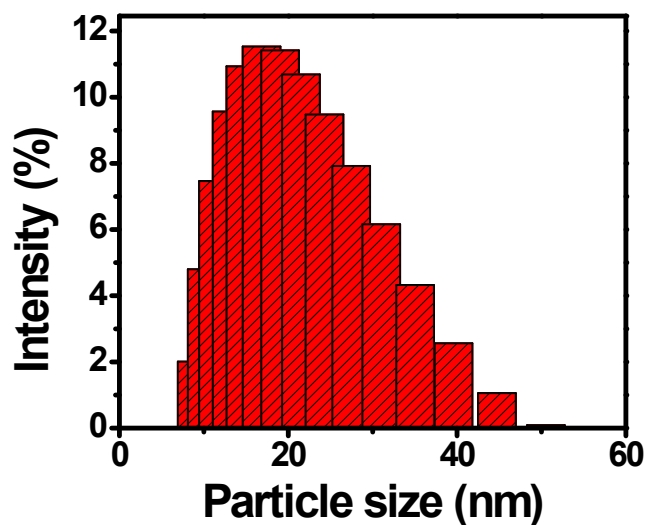


Fig. S1 DLS spectra of citrate capped AgNPs solution showing an average diameter of 17 nm.

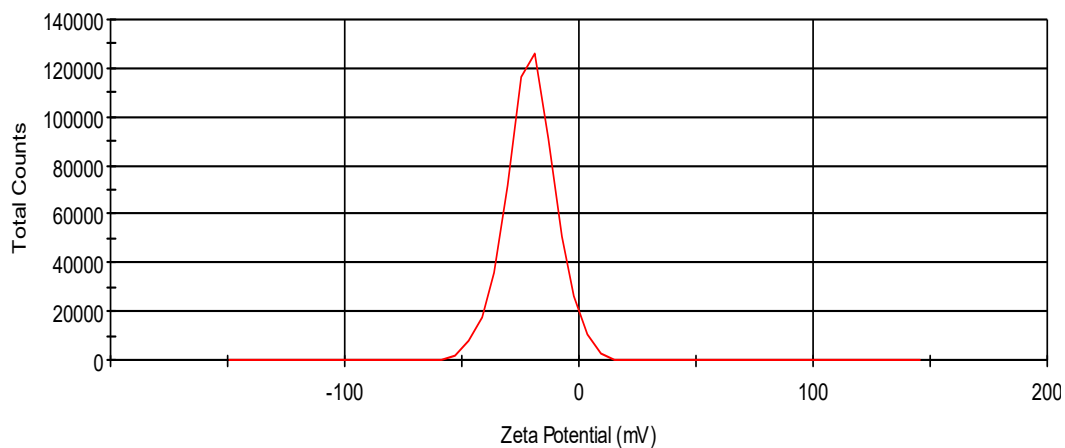


Fig. S2 The zeta potential of the as-synthesized AgNPs indicating the value of -20.5 mV.

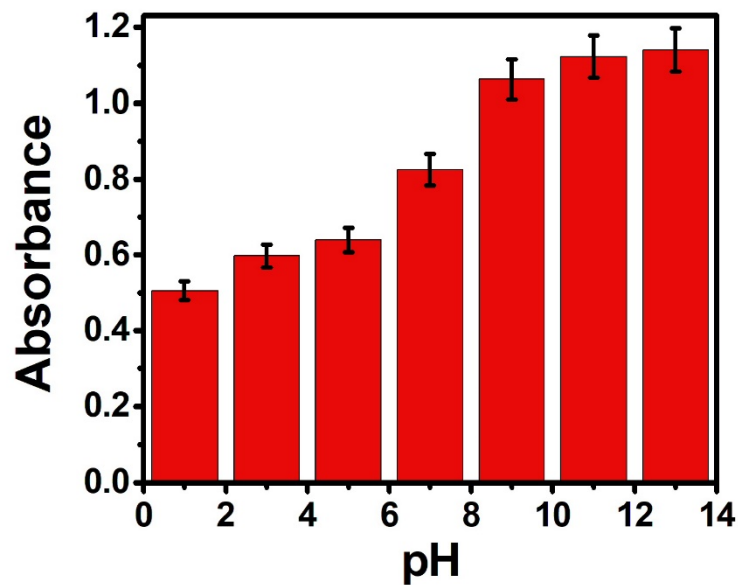


Fig. S3 The absorbance intensity of AgNPs plasmonic peak at 405 nm with variation of pH ranging from 1 to 13.

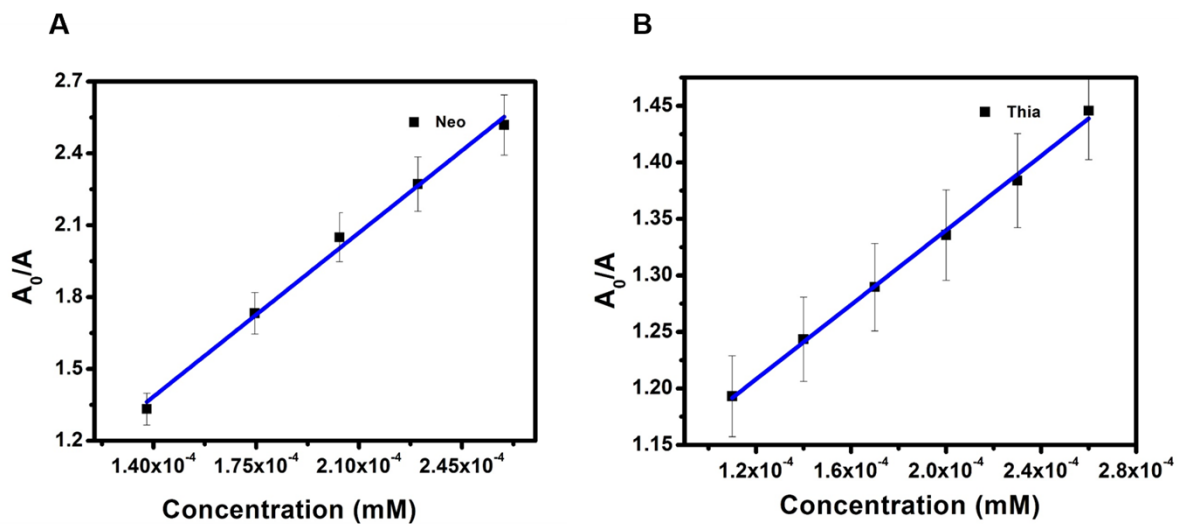


Fig. S4 Linear plot of A_0/A versus concentration of (A) neomycin and (B) thiamine.

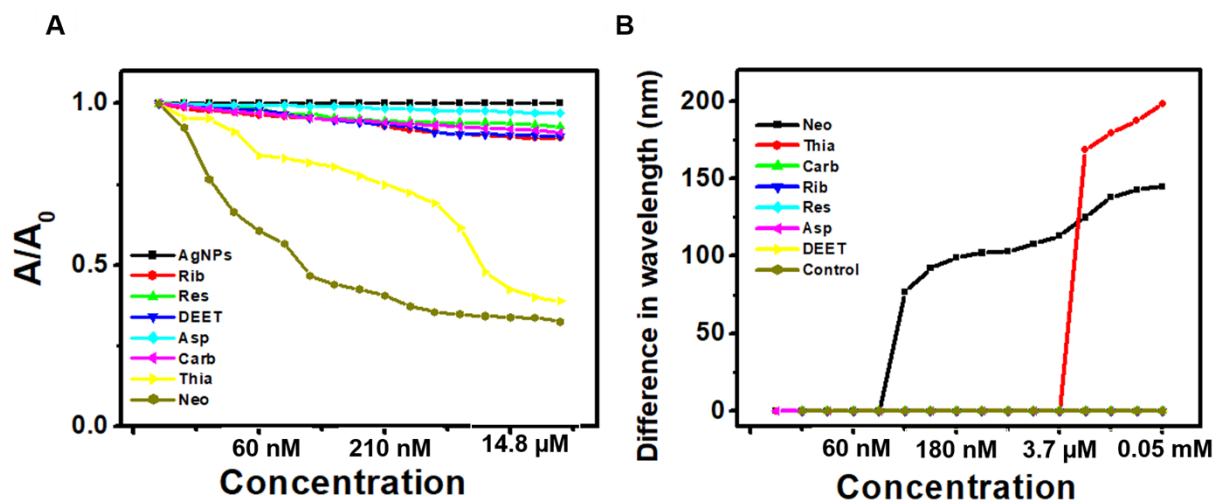


Fig. S5 (A) The quenching trend of the AgNPs upon the addition of different drugs. (B) The shifting trend of neomycin and thiamine towards higher wavelength region compared to other drugs.

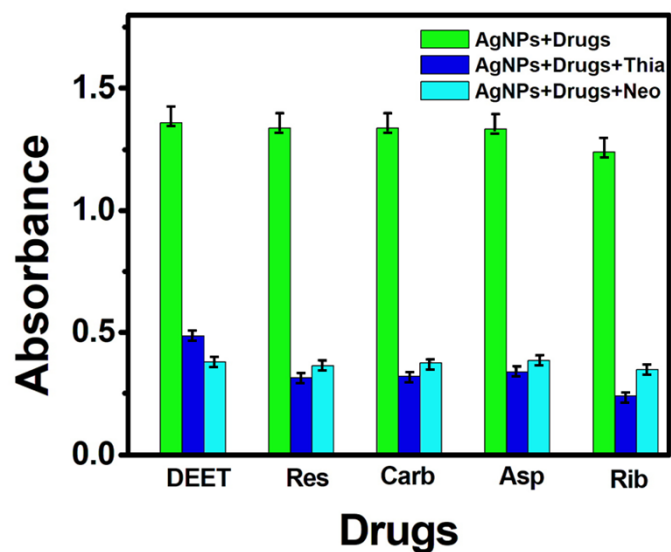


Fig. S6 The interference study of citrate capped AgNPs with neomycin and thiamine.

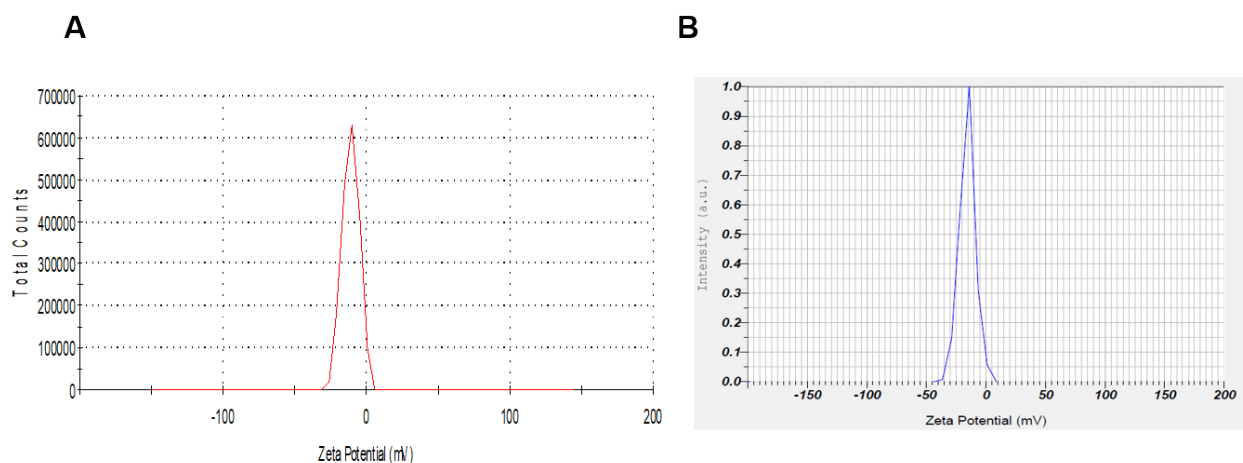


Fig. S7 Zeta potential graph of the AgNPs solution after addition of 0.05 mM of (A) neomycin and (B) thiamine.

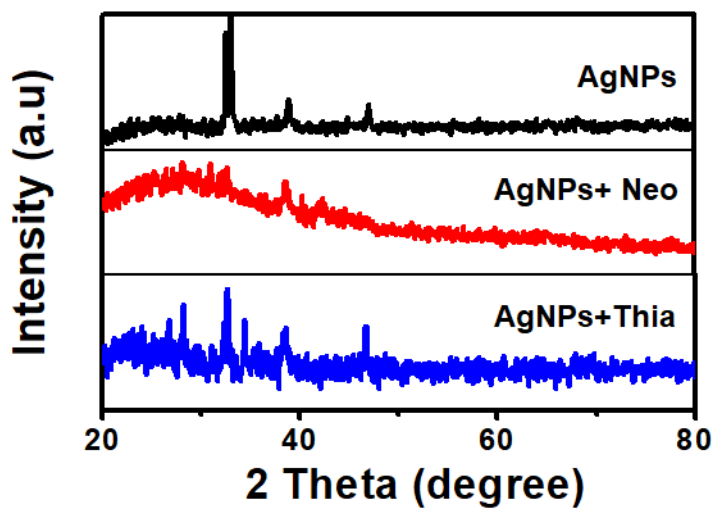


Fig. S8 XRD patterns of the AgNPs before and after the addition of neomycin and thiamine.

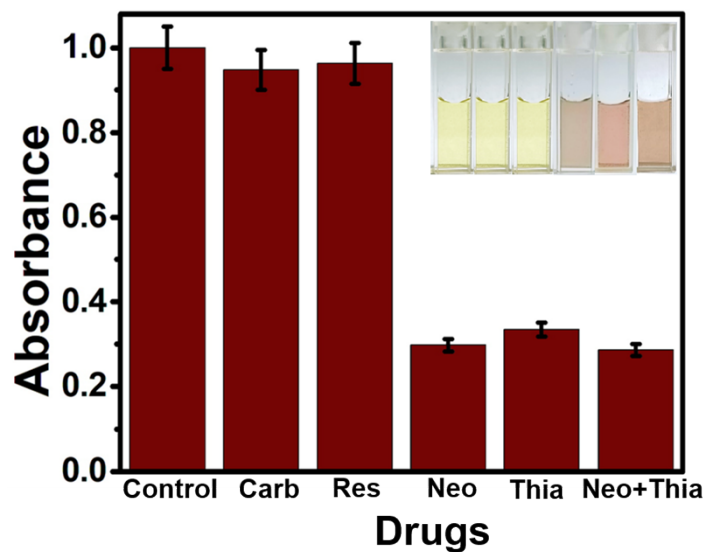


Fig. S9 Changes of AgNPs absorbance peak intensity at 405 nm with respect to the addition of drugs. The digital images showing the respective color change of AgNPs colloidal solution after the incubation of the drugs in the same consecutive order (inset).

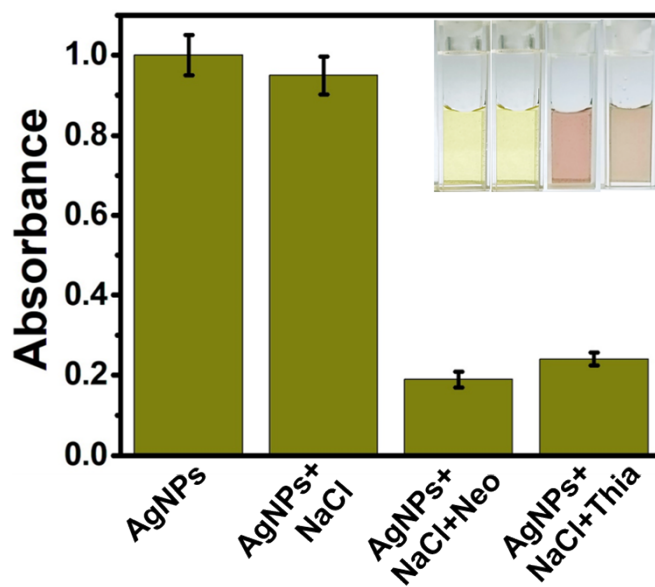


Fig. S10 Changes of AgNPs plasmonic peak intensity after the addition of NaCl and analytes. Digital images showing AgNPs color change after the treatment with additives in the same consecutive order (inset).