

Analyte-mediated Growth of Gold Nanoparticles for Non-aggregation

Colorimetric Detection of Manganese (II)

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Supplementary data

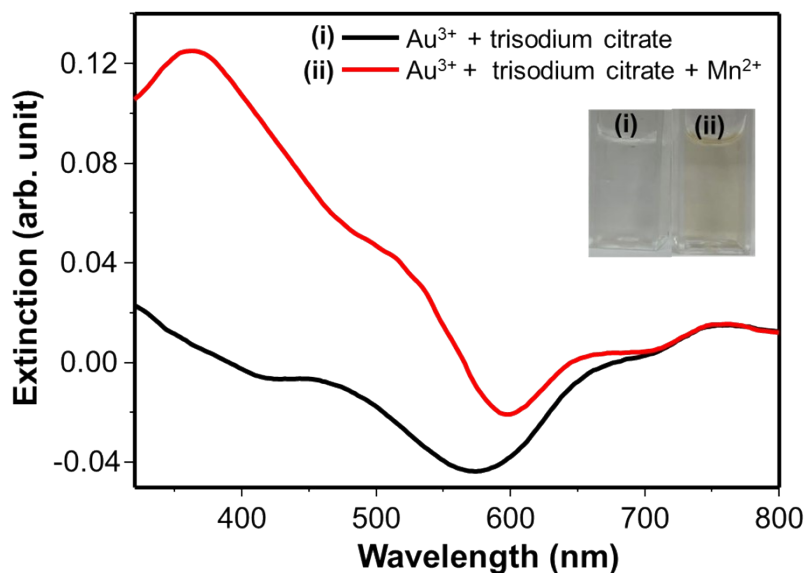


Fig. S1 UV/Visible absorption spectra of HAuCl_4 + trisodium citrate and HAuCl_4 + trisodium citrate + Mn^{2+} mixtures. The concentrations of HAuCl_4 , trisodium citrate, and Mn^{2+} are 0.25 mM, 8 mM, and 100 μM respectively. The inset shows the picture of the mixtures.

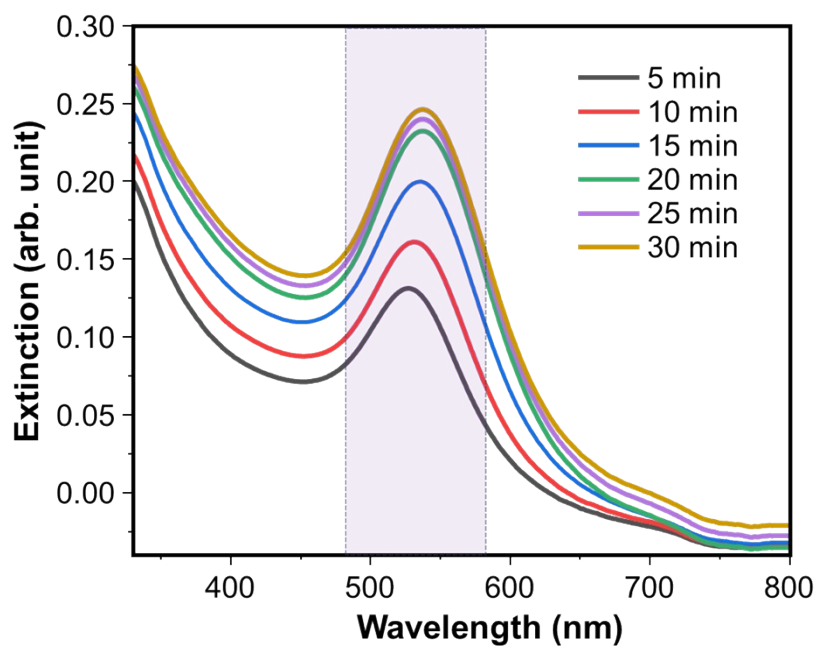


Fig. S2 Extinction spectra of AuNPs evolved with time in the presence of Mn^{2+} .

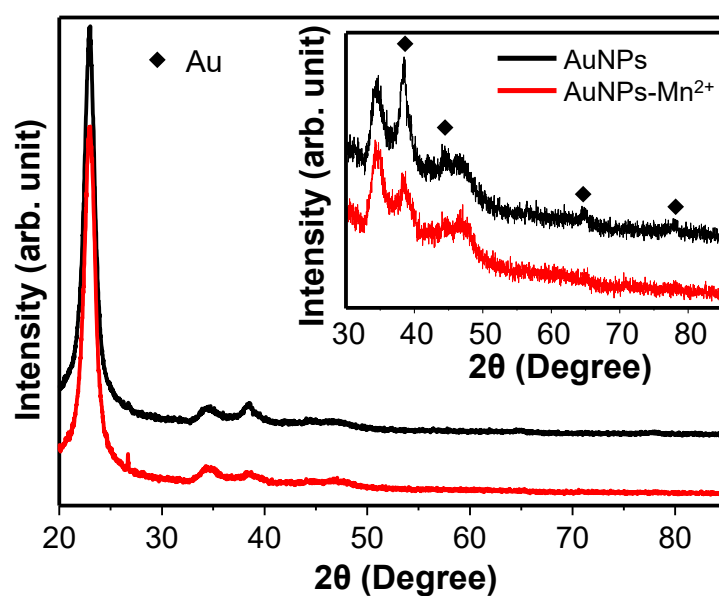


Fig. S3 XRD patterns of AuNPs deposited on filter paper. The inset shows the enlarged XRD patterns.

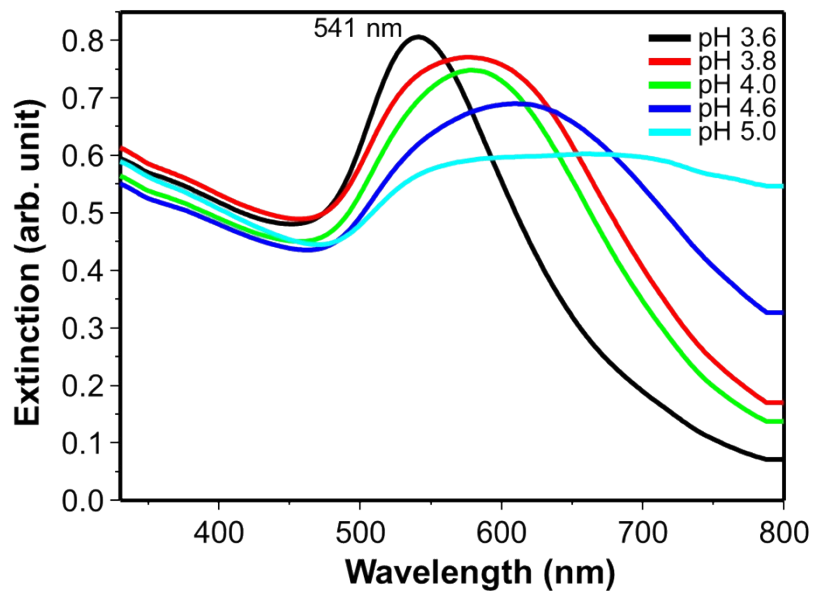


Fig. S4 Extinction spectra of AuNPs after addition of 100 μM Mn^{2+} using buffer of different pH.

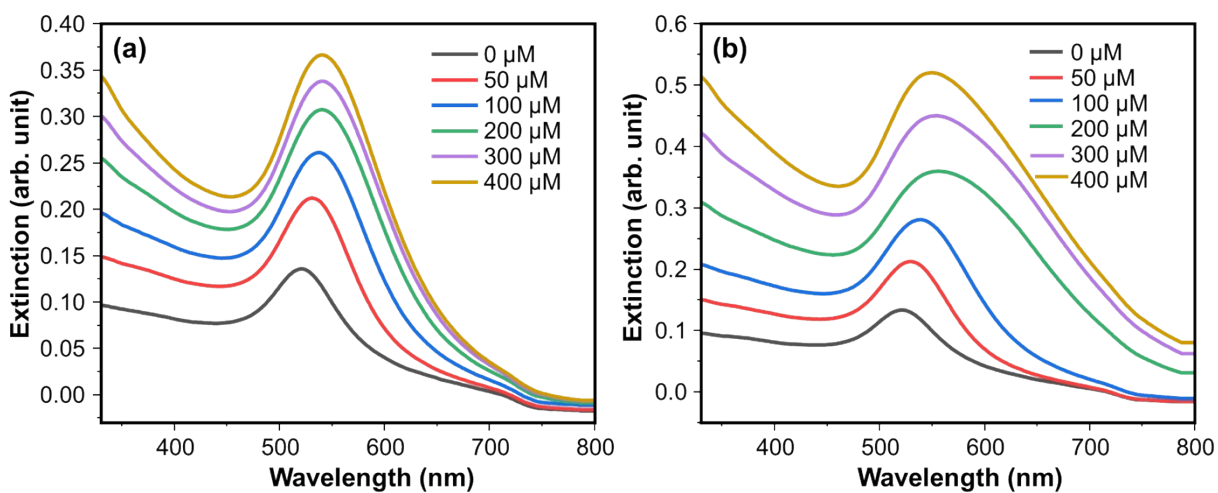


Fig. S5 Extinction spectra of AuNPs showing effect of concentration of HAuCl_4 on addition of (a) 10 μM Mn^{2+} and (b) 50 μM Mn^{2+} .