

Supplemental Information

Figure S1. Kinetics of the absorbance maxima in aqueous solution of the formed Au-NPs in the presence of 5.0×10^{-7} M Pb^{2+} .

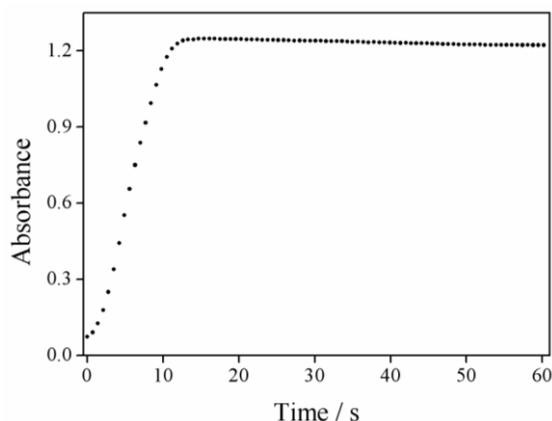


Figure S2. Fluorescence emission spectra of gallic acid (1.0×10^{-4} M, pH 4.5) interacted with different concentration Pb^{2+} (0 M, 1.0×10^{-5} M, 5.0×10^{-5} M, 1.0×10^{-4} M, 5.0×10^{-4} M, 1.0×10^{-3} M). $\lambda_{\text{ex}} = 212$ nm. Excitation and emission slit widths were set at 5.0 nm and 10.0 nm, respectively.

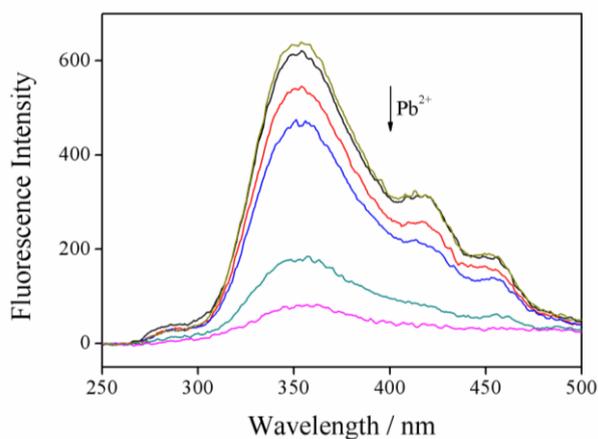


Figure S3. Plots of the relationship between the shift of the absorption band ($\Delta\lambda_{\text{Max}}$) and time over 4 h at different concentrations of Pb^{2+} (1, 1.0×10^{-6} M; 2, 5.0×10^{-7} M; 3, 1.0×10^{-7} M; 4, 5.0×10^{-8} M).

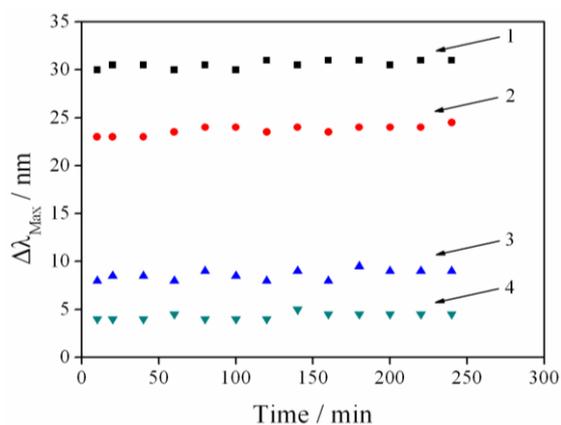


Figure S4. A plot of A_{600}/A_{541} ratios against the concentration of Pb^{2+} in the range of $0-1.0 \times 10^{-6}$ M.

