Electronic Supplementary Material

A colorimetric detection of Pb^{2+} by using sodium thiosulfate and hexadecyl thimethyl ammonium bromide modified gold nanoparticles

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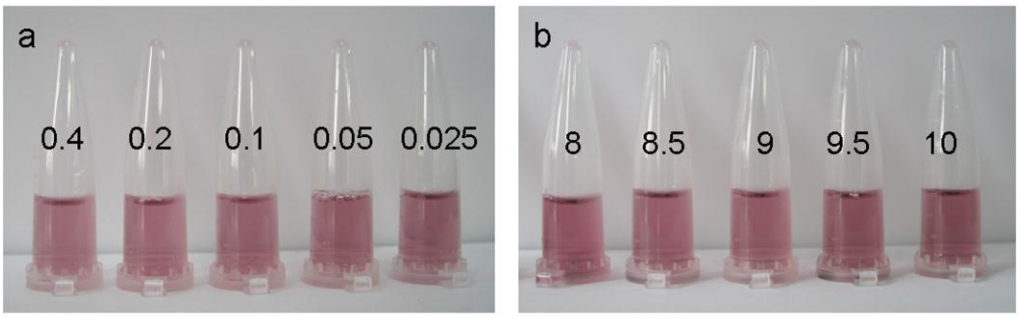

Fig. S1 (a) Effect of the concentration of $Na_2S_2O_3$ on the color of Au NPs solutions in the presence of 10 μM Pb^{2+} ($[Na_2S_2O_3]$=0.4, 0.2, 0.1, 0.05, 0.025 M) (b) Effect of pH on the color of Au NPs solutions in the presence of 3 μM Pb^{2+} (pH=8, 8.5, 9, 9.5, 10).

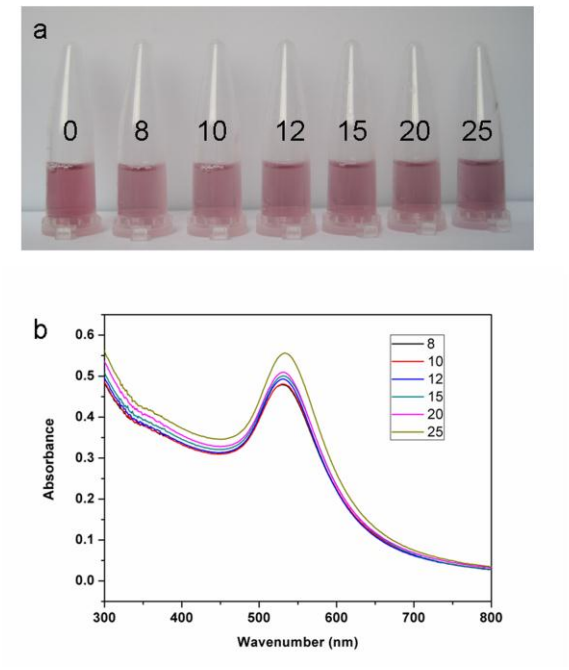

Fig. S2 (a) The corresponding photo images (b) UV-vis absorption spectra of samples with different concentrations of Pb^{2+} (8, 10, 12, 15, 20, 25 μM).

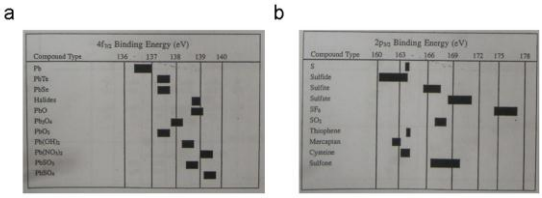

Fig. S3 XPS data of Pb (a) and S (b).

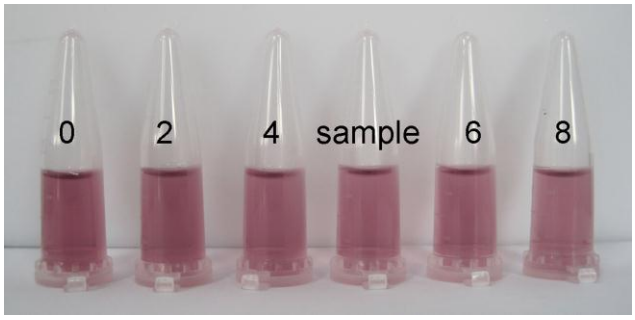

Fig. S4 The photo images of CTAB-Au solutions in the presence of Pb^{2+} with different concentrations (blank, 2 μM, 4 μM, sample, 6 μM, 8 μM).