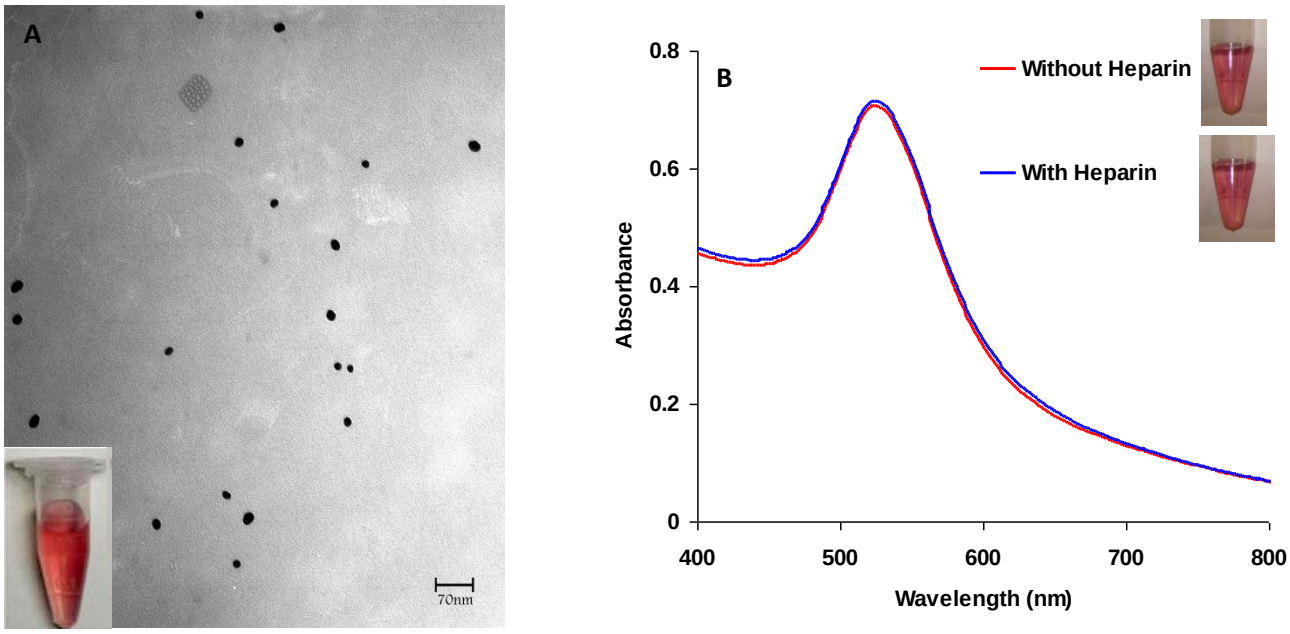

Figure S1

Figure S1. A)TEM images and photograph of the citrate-stabilizedAuNPs. B) absorbance spectra of the citrate-capped AuNPs in the absence in the presence of heparin (6.2 µgmL^{-1}).

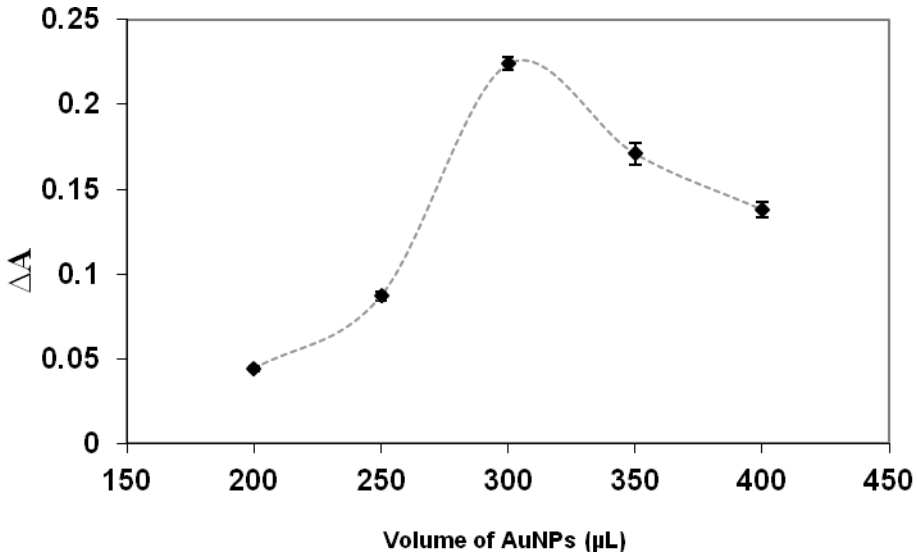

Figure S2

Figure S2. Difference Absorbance at 528 nm for 200-400 µl of AuNPs after increasing heparin (3 µg mL^{-1}). ΔA is the absorbance difference before and after addition of Heparin to AuNPs.

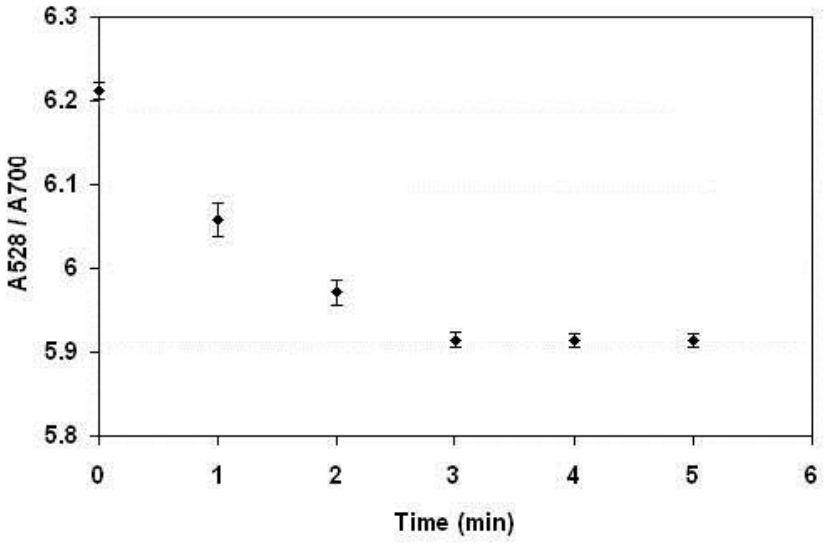

Figure S3

Figure S3. Time-dependent changing in the absorption ratio (A_{528}/A_{700}) of AuNPs after addition of 3.0 μg mL^{-1} heparin. Experimental conditions: 200μL phosphate buffer (pH 7), 300 μLAuNPs, and room temperature

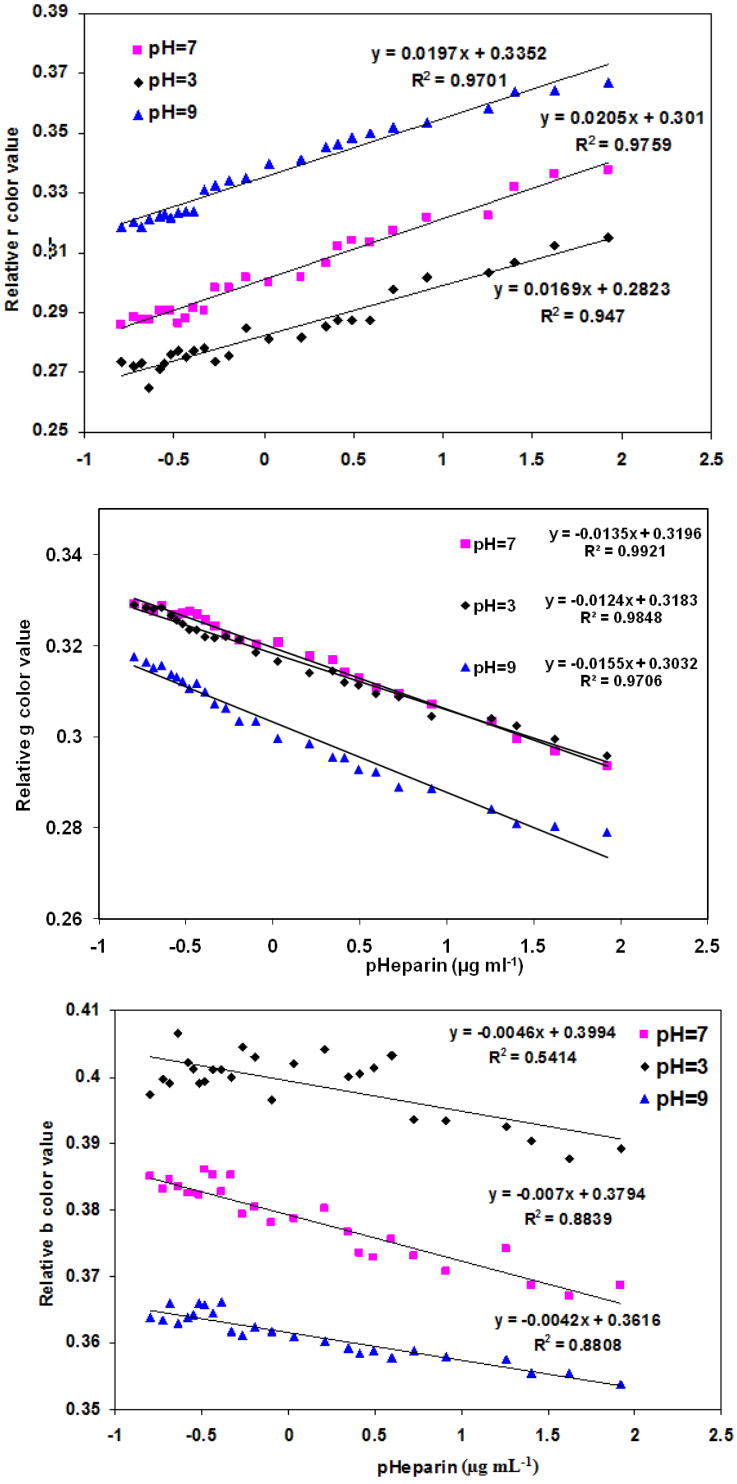

Figure S4

Fig S4. Calibration graph of heparin at different pH and color values(r, g, b)

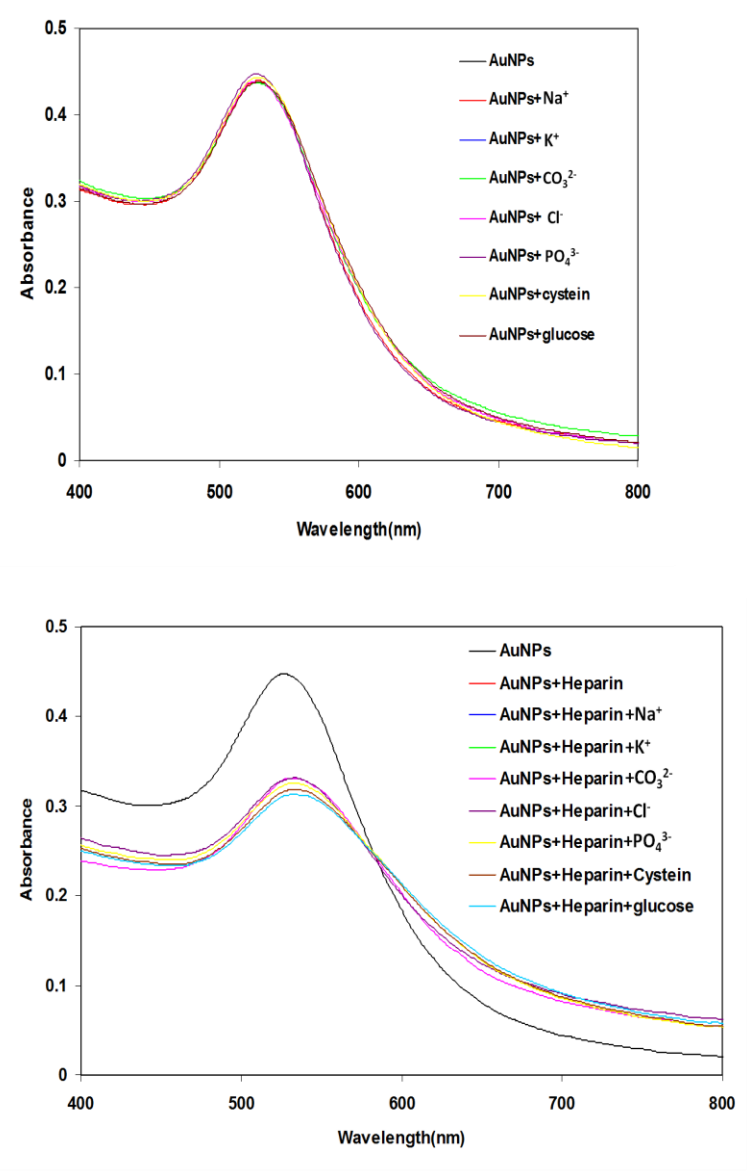

Figure S5

Figure S5. Effect of some possible interfearing species on the absorbance spectra of AuNPs (A) and AuNPs-heparin (B). Experimental condition: 200µL phosphate buffer, 300 µLAuNPs, and room temperature

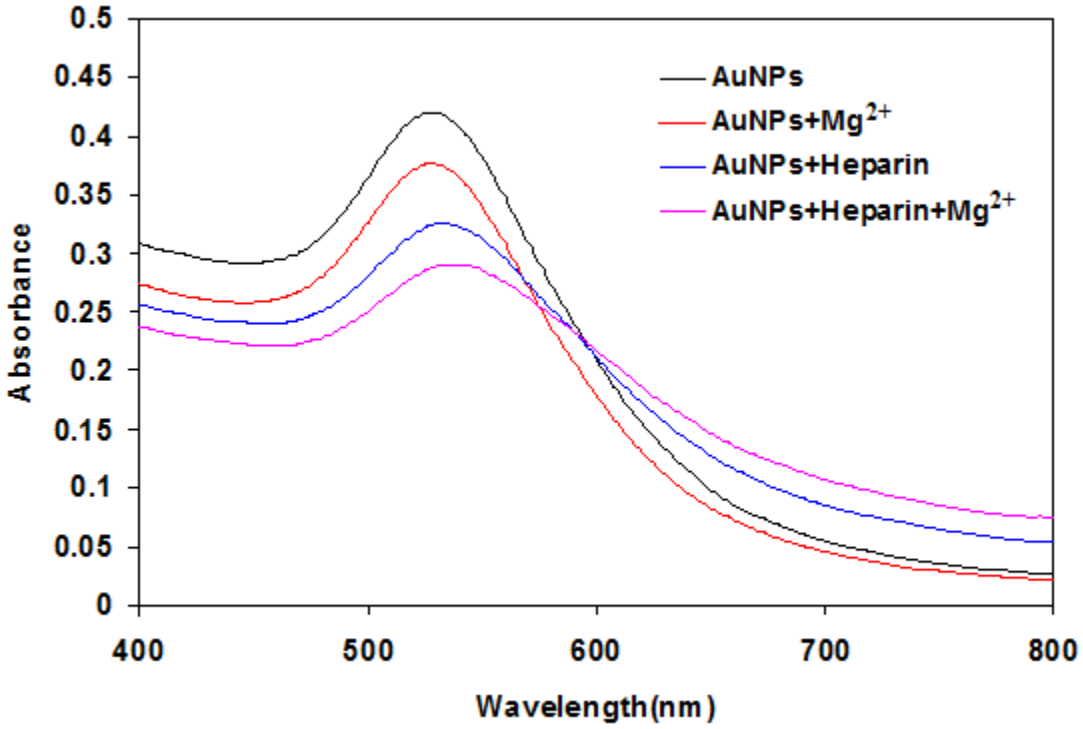

Figure S6

Figure S6. Effect of Mg^{2+} on the absorbance spectra of AuNPs and AuNPs-heparin. Experimental condition: 200μL phosphate buffer, 300 μLAuNPs, and room temperature

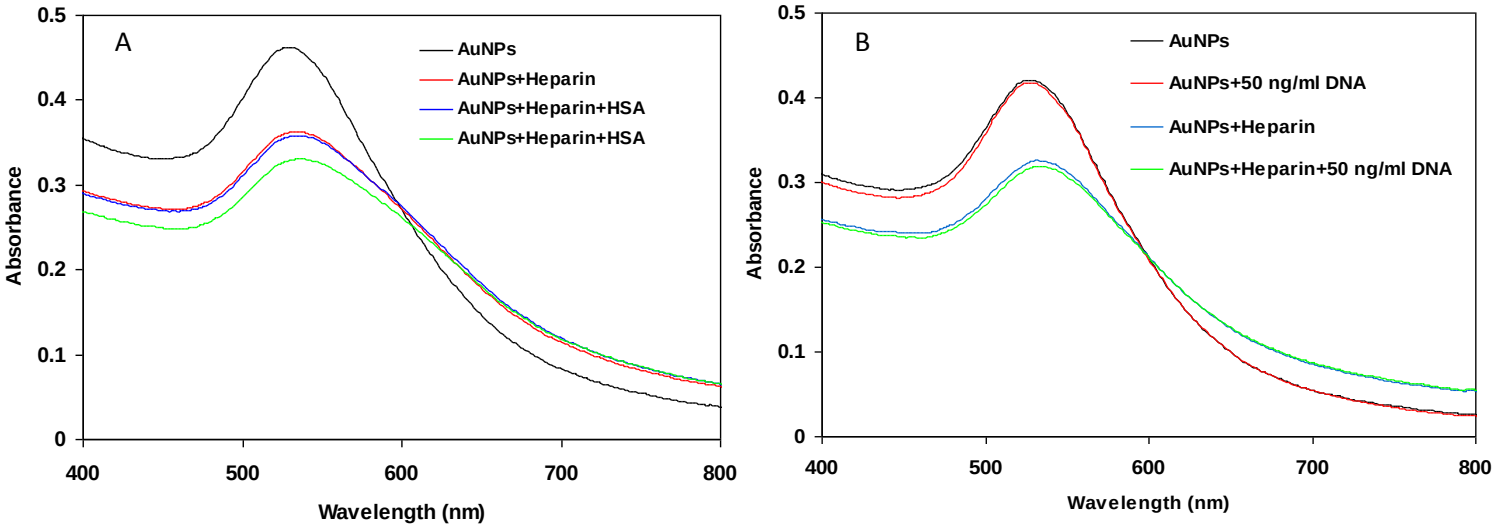

Figure S7

Figure S7. Absorption spectra of A) AuNPs alone (black), AuNPs + 3 µg/mL heparin (red), AuNPs + 3µg/mL heparin + HSA (blue), and AuNPs + 3µg/mL heparin + 8µg/mL HSA (green), B) AuNPs alone (black), AuNPs + 50ng/mL DNA (red), AuNPs + 3 µg/mL heparin (blue), and AuNPs + 3µg/mL heparin + 50 ng/mL DNA (green). Experimental conditions: 200µL phosphate buffer (pH 7), 300 µLAuNPs, and room temperature