Supporting information

Caption:

- 1. Gold nanoparticles modified by different concentrations of D-xylose.
- $2\sqrt{100}$ The effect of different various experimental parameters and the comparative study on the detection of Cim by using citrated capped AuNPs and D-x@AuNPs.
- 3. The effect of different pH on the detection and its ultraviolet absorption spectrum.
- 4. The effect of different temperature on the detection and its ultraviolet absorption spectrum.

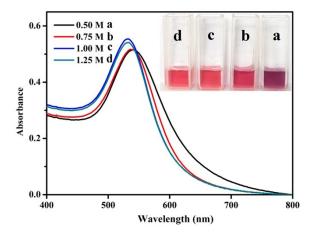


Fig. S1 Gold nanoparticles modified by different concentrations of D-xylose

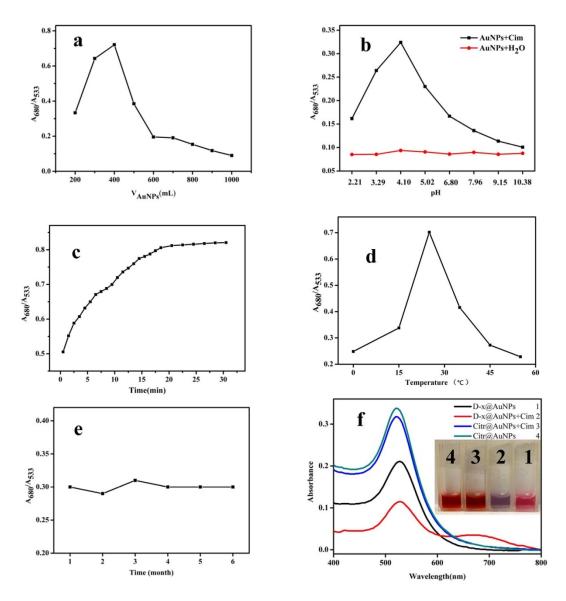


Fig. S2. (a) Effect of the amount of AuNPs, (b) pH, (c) incubation time, (d) temperature on A_{680}/A_{533} ratio of the system. The concentration of Cim was 4×10^{-7} M. (e) The absorption values at 533 nm of D-x@AuNPs over 6 months period. (f) UV-vis absorption spectra of (1) D-x@AuNPs, (2) D-x@AuNPs with Cim $(5 \times 10^{-7} \, \text{M})$ (3) Citr@AuNPs with Cim $(5 \times 10^{-7} \, \text{M})$ and (4) Citr@AuNPs.

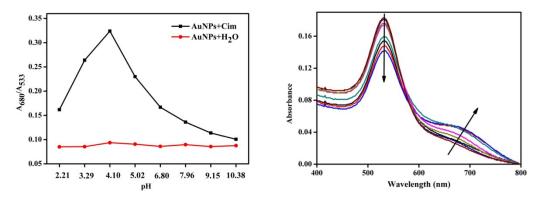


Fig.S3 The effect of different pH on the detection and its ultraviolet absorption spectrum.

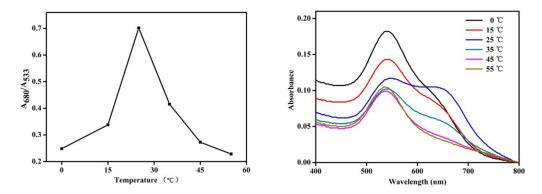


Fig.S4 The effect of different temperature on the detection and its ultraviolet absorption spectrum.