ChemistryOPEN

Supporting Information

New Synthesis of Gold- and Silver-Based Nano-Tetracycline Composites

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Supporting Information

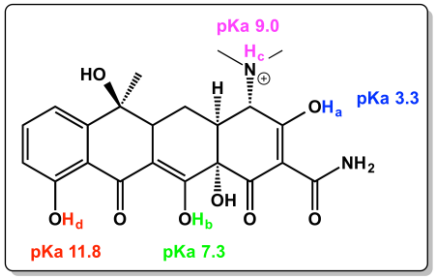

Figure S1. Structure of Tetracycline and its deprotonation sites with corresponding pka values.

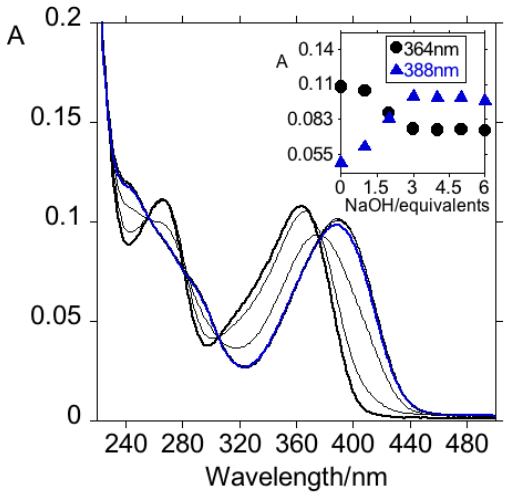

Figure S2. UV/Vis absorption spectra of titration of tetracycline with aqueous solution of NaOH. ([Tetracycline]=1.10^{-5}M in DMSO).

Cation metal sensing applications

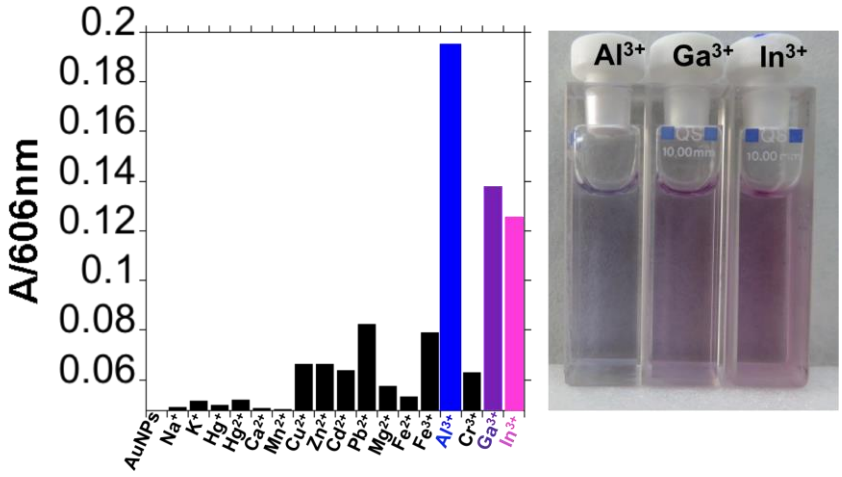

Figure S3: Bar diagram showing the intensity of LSRP band at 606 nm for addition of 500 nM of Na^{+}, K^{+}, Hg^{+}, Mg^{2+}, Ca^{2+}, Mn^{2+}, Cu^{2+}, Zn^{2+}, Cd^{2+}, Hg^{2+}, Pb^{2+}, Cr^{3+}, Fe^{2+}, Fe^{3+}, Al^{3+}, Ga^{3+}, In^{3+} and colour solution with addition of Al^{3+}, Ga^{3+} and In^{3+}.

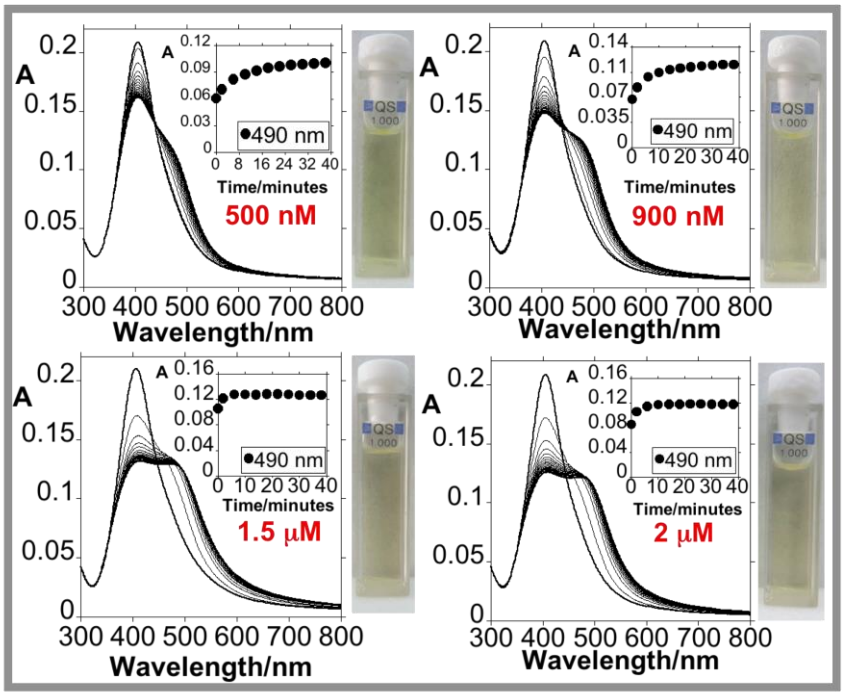

Figure S4. Spectrophotometric titration of AgNPs@TC with the addition of increasing amounts of $Al(NO_3)_3$ and naked eye detection.

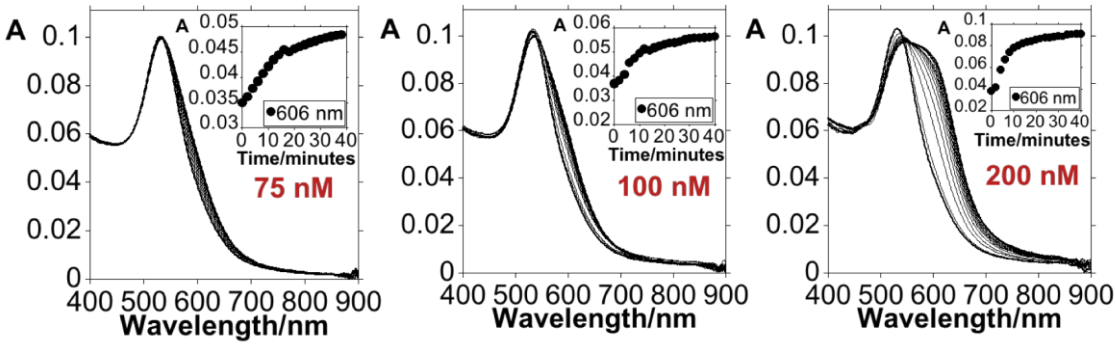

Figure S5. Spectrophotometric titation of AuNPs@TC with addition of differents fixed quantities of Al(III) with A= 0.1.

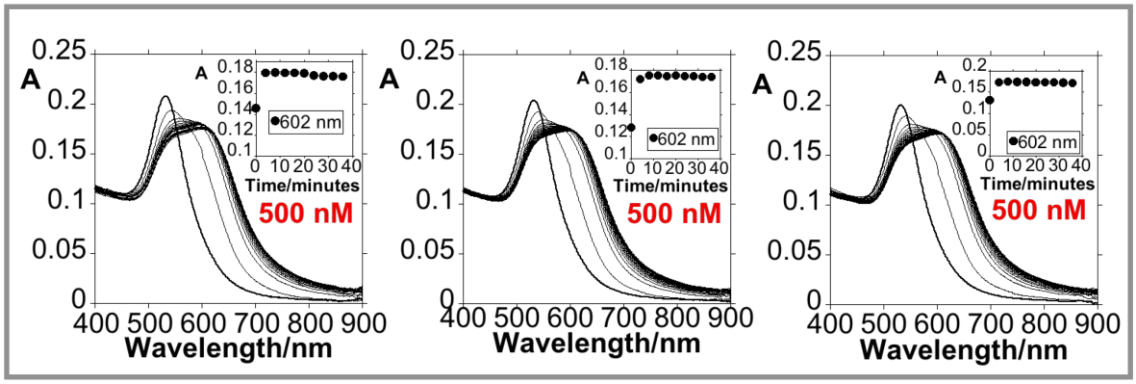

Figure S6. Three different replics of spectrophotometric titration of AuNPs@TC with the addition of 500 nM of $Al(NO_3)_3$.