

Selective and naked eye colorimetric detection of creatinine by aptamer-based target induced passivation of gold nanoparticles

Chiranjit Das^a, Jeethu Raveendran^b, Jagadeesh Bayry^b, P Abdul Rasheed^{b,a*}

^aDepartment of Chemistry, Indian Institute of Technology Palakkad, Palakkad, Kerala, India- 678623

^bDepartment of Biological Sciences and Engineering, Indian Institute of Technology Palakkad, Palakkad, Kerala, India- 678623

*abdulrasheed@iitpkd.ac.in (PAR)

Supplementary information

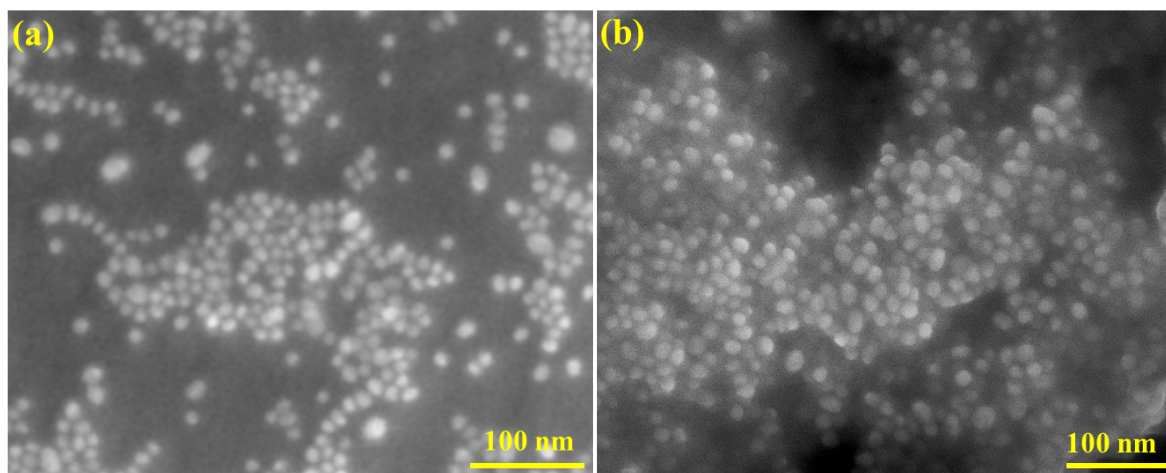


Fig. S1. SEM images of (a) AuNPs and (b) DNA-AuNPs

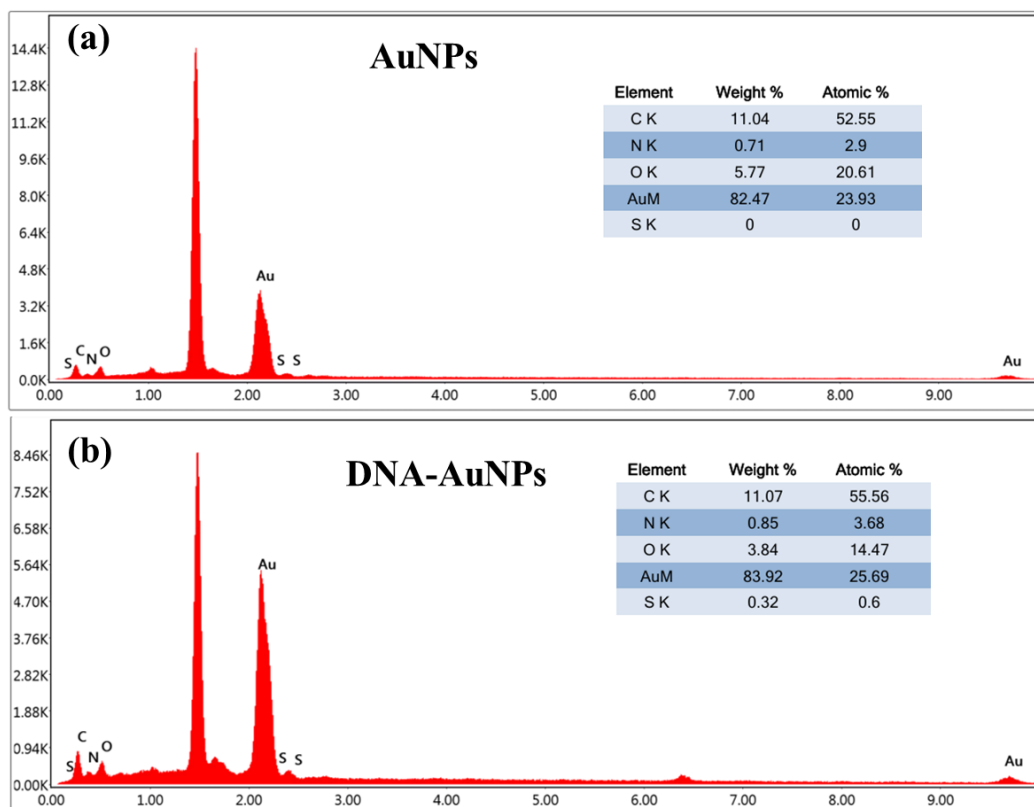


Fig. S2. EDS spectra of (a) AuNPs and (b) DNA-AuNPs

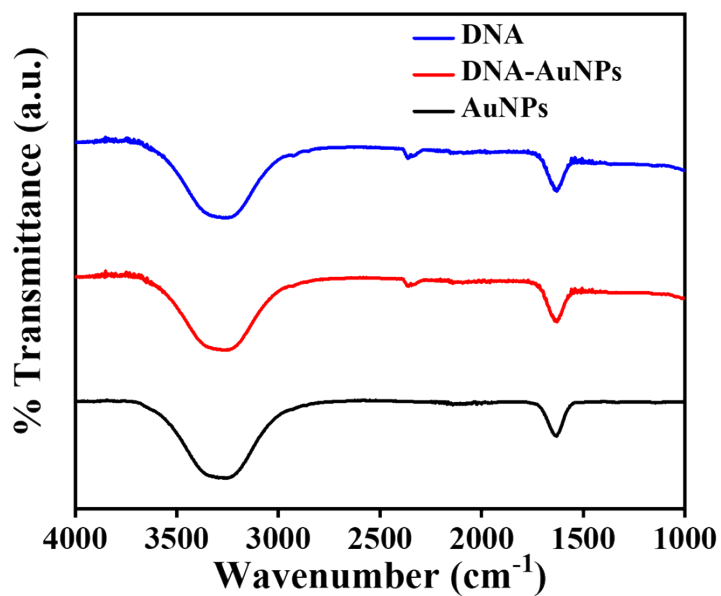


Fig. S3. FTIR spectra of DNA, AuNPs and DNA-AuNPs.

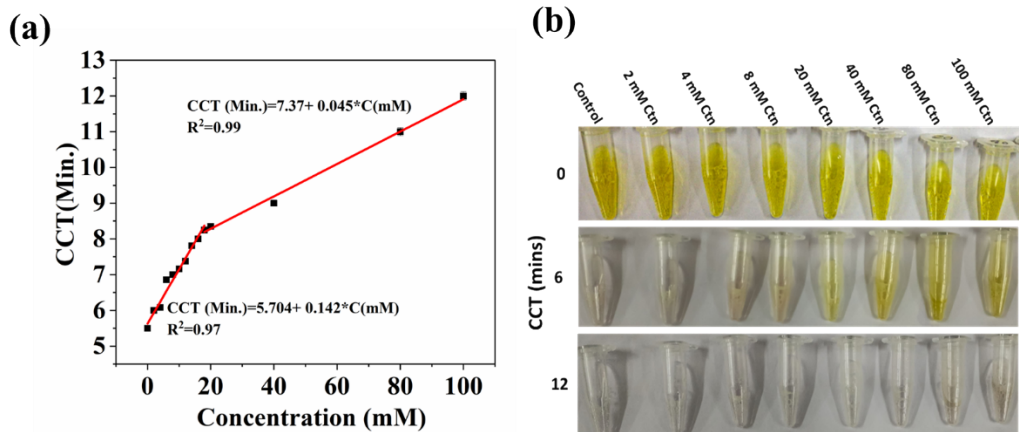


Fig. S4. (a) The CCT versus concentration of creatinine of the developed assay with varying concentrations from 0-100 mM (b) Photographs capturing the reaction mixtures at 0, 6, and 12 min.