

Supplementary material (ESI) for Analyst communication

Naked eye detection of Nitric oxide release from nitrosothiols aided by gold nanoparticles

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TEM images of gold nanoparticles prepared using chitosan and citrate as stabilising agents

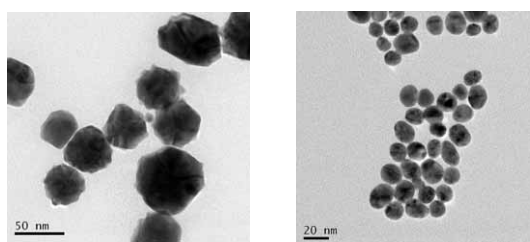


Fig. S1 TEM images of gold nanoparticles prepared (a) 50 nm (b) 20 nm.

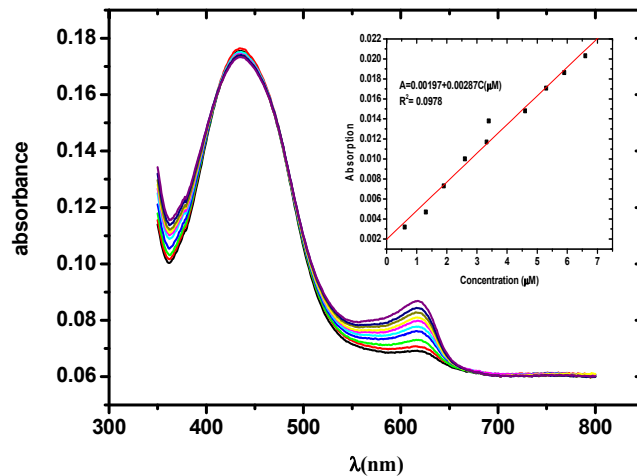


Fig. S2 UV-Vis spectra of CD-Fc in the presence of various concentration of NO. The spectra were recorded at pH < 3 in dil H_2SO_4 . Each addition corresponds to 600 nM. Inset shows the calibration plot of absorbance vs concentration

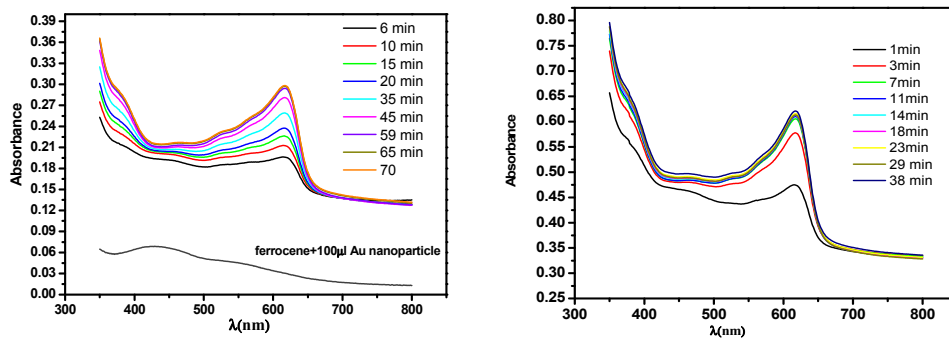


Fig. S3 Decomposition of RSNO monitored spectrophotometrically with respect to ferrocenyl cation formation in the presence of gold nanoparticles (a) 50 nm (b) 20 nm

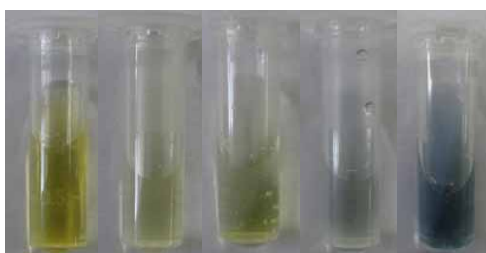


Fig. S4 Colour change observed during NO release from RSNO

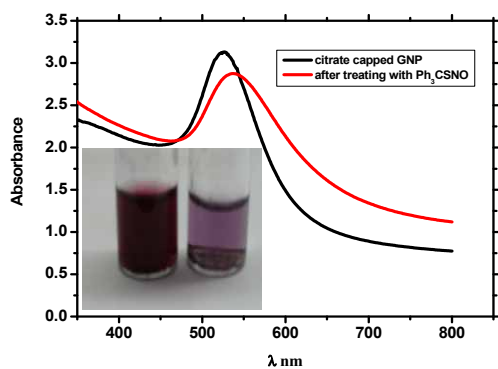
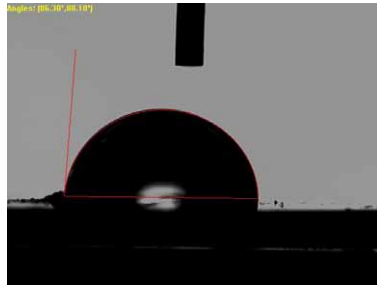


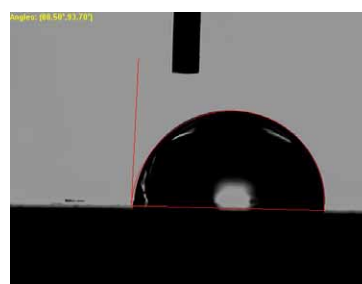
Fig. S5 UV-Vis spectrum showing red shift for citrate capped GNP after treating with Ph_3CSNO . Inset shows colour change observed form burgundy to blue



(a)



(b)



(c)

Fig.S6 Contact angle measurement confirming GNP-SR bond formation (a) Au-Chitosan-GNP – 86° (b) Au-Chitosan-GNP-Ph₃CSNO – 124° (c) Au-Chitosan-Ph₃CSNO – 88°