

Functionalization of silver nanoparticles with mPEGylated luteolin for selective visual detection of Hg²⁺ in water sample

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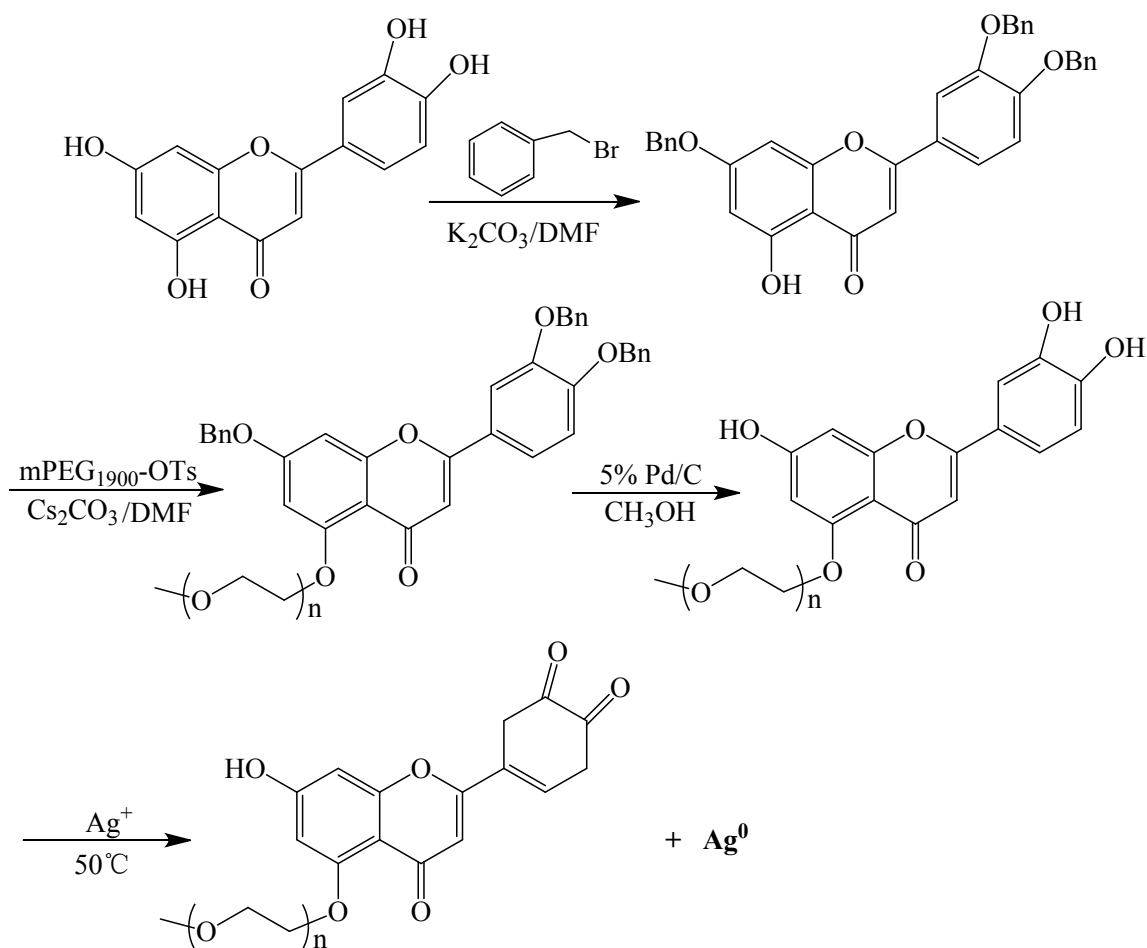


Fig.S1 Synthetic route of mPEGylated luteolin conjugates and mPEGylated luteolin-AgNPs nanoparticles

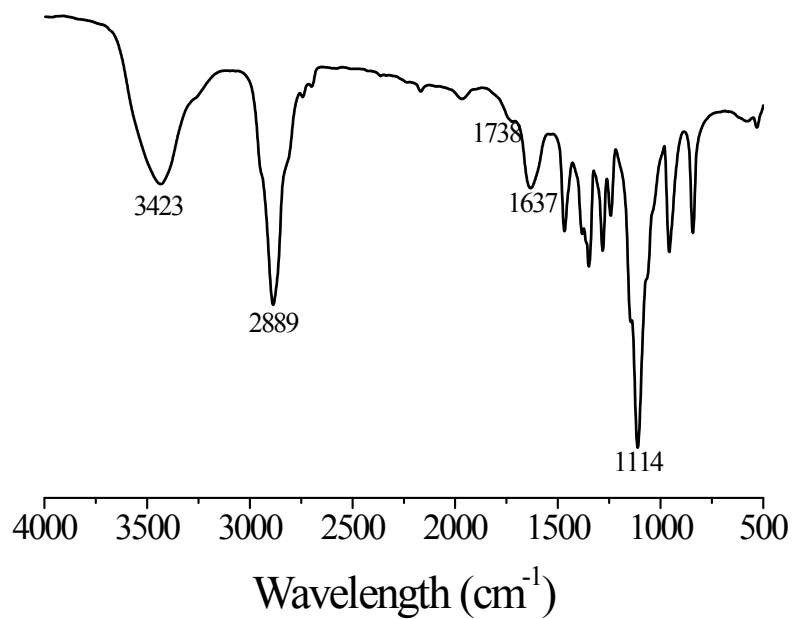


Fig.S2 FT-IR spectra of mPEGylated luteolin-AgNPs

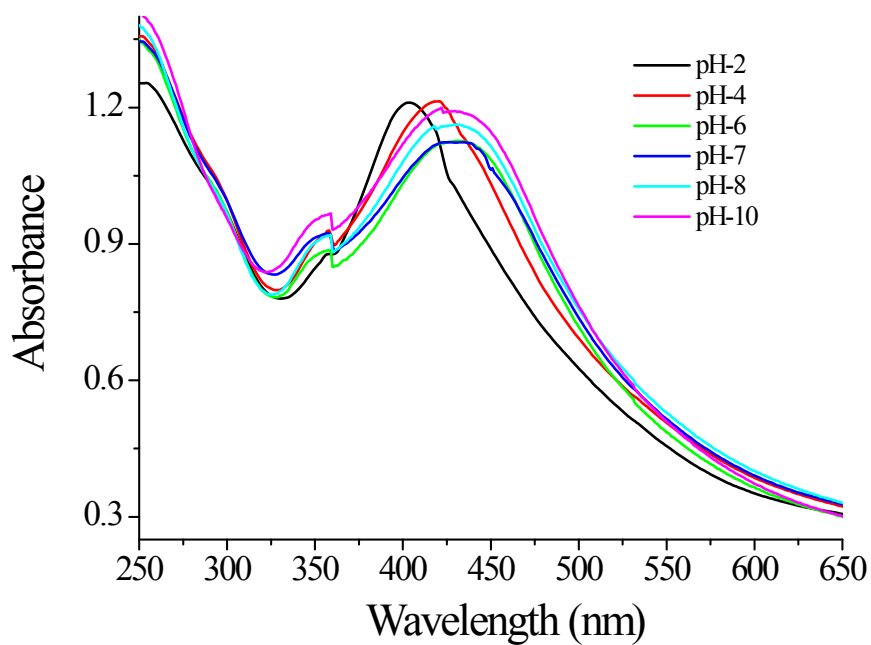


Fig.S3 UV-vis absorption spectrum of mPEGylated luteolin-AgNPs nanoparticles at different pH.

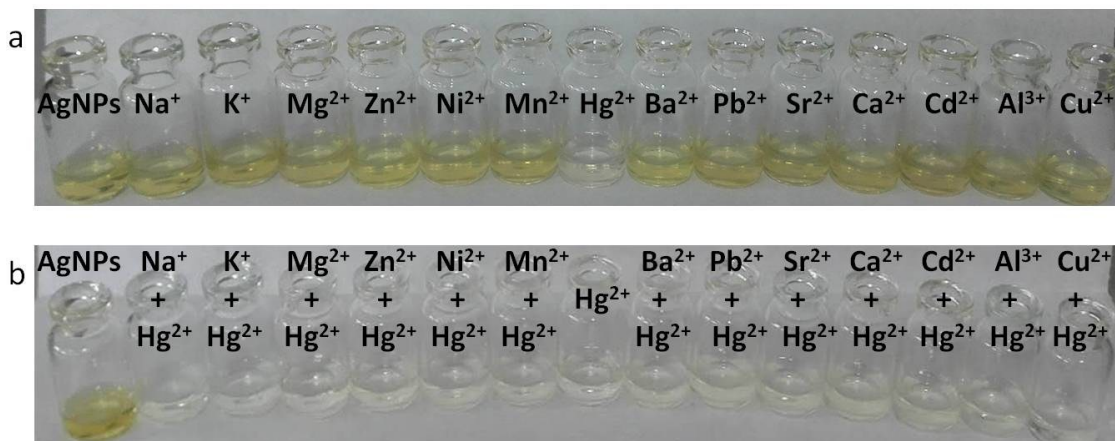
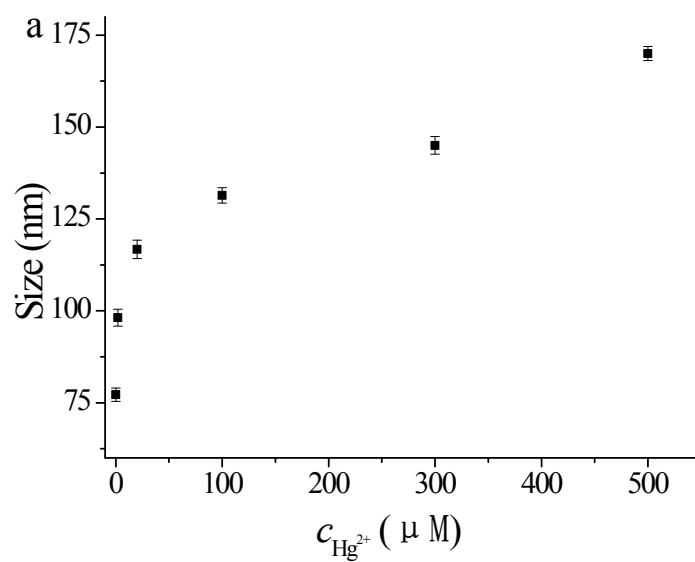


Fig. S4 Colorimetric responses of (a) AgNPs with different metal ions and (b) selectivity for Hg^{2+} in presence of equal amounts of other metal ions.



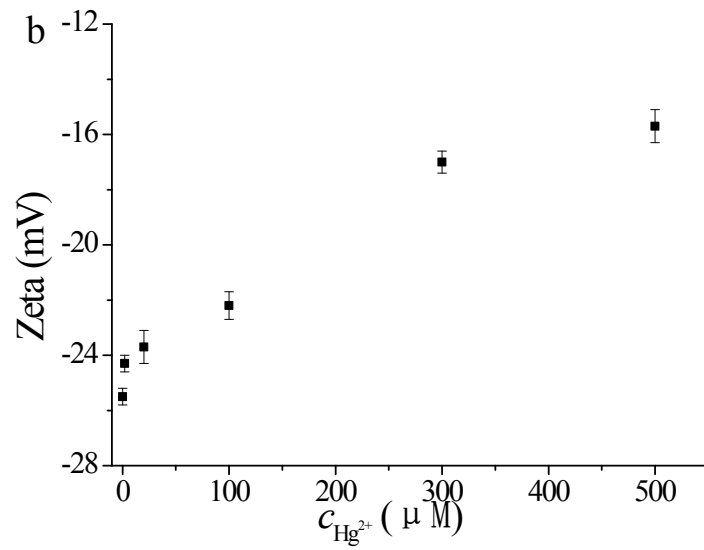


Fig.S5 (a) Average size and (b) zeta potential of mPEGylated luteolin-AgNPs with various concentrations of Hg^{2+} .

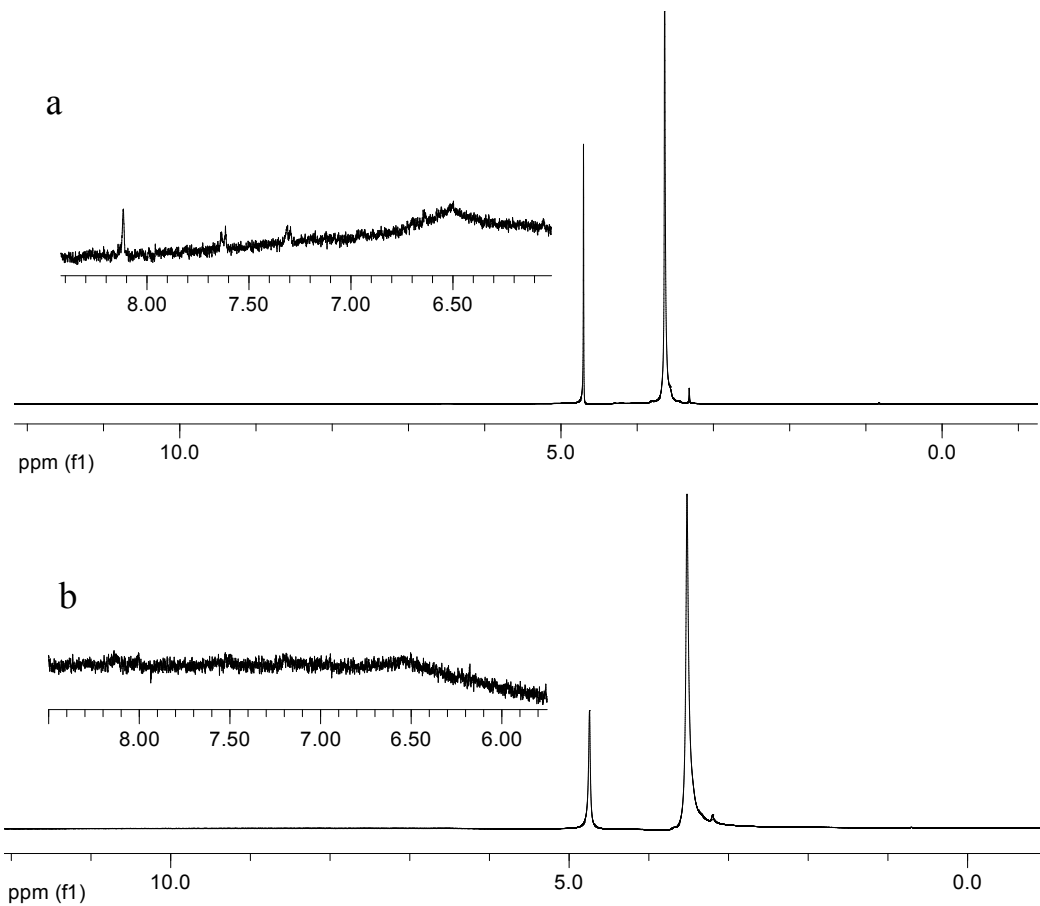


Fig.S6 The ^1H NMR spectrum of mPEGylated luteolin-AgNPs nanoparticles in D_2O in the absence (a) and presence (b) of Hg^{2+} .