Electronic Supplementary Material (ESI) for RSC Advances

Supporting Information

Mercury(Ⅱ)-stimulated oxidase mimetic activity of silver nanoparticles as sensitive and selective mercury (Ⅱ) sensor

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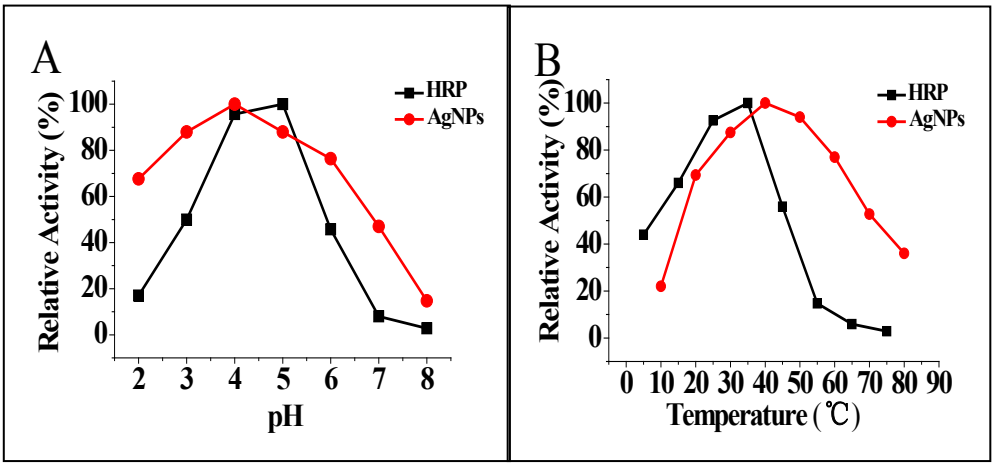

Fig.S1 The relative catalytic activity of HRP (■) and AgNPs (●) under different solution pH (A) and different temperature(B).

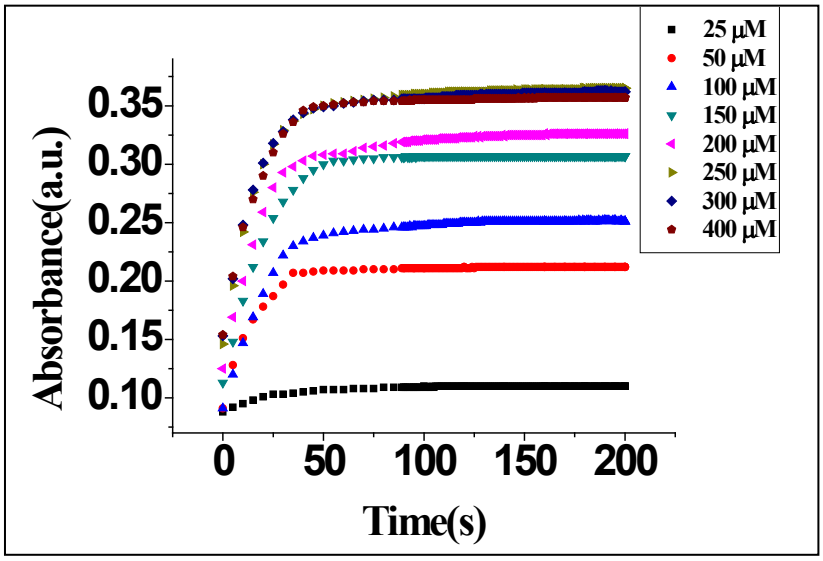

Fig. S2 Absorbance of oxidized TMB at 650 nm versus time for by Cit-AgNPs in the presence of Hg^{2+} with different concentrations of TMB. Conditions: [Hg^{2+}]=10 μM, pH=4.0.

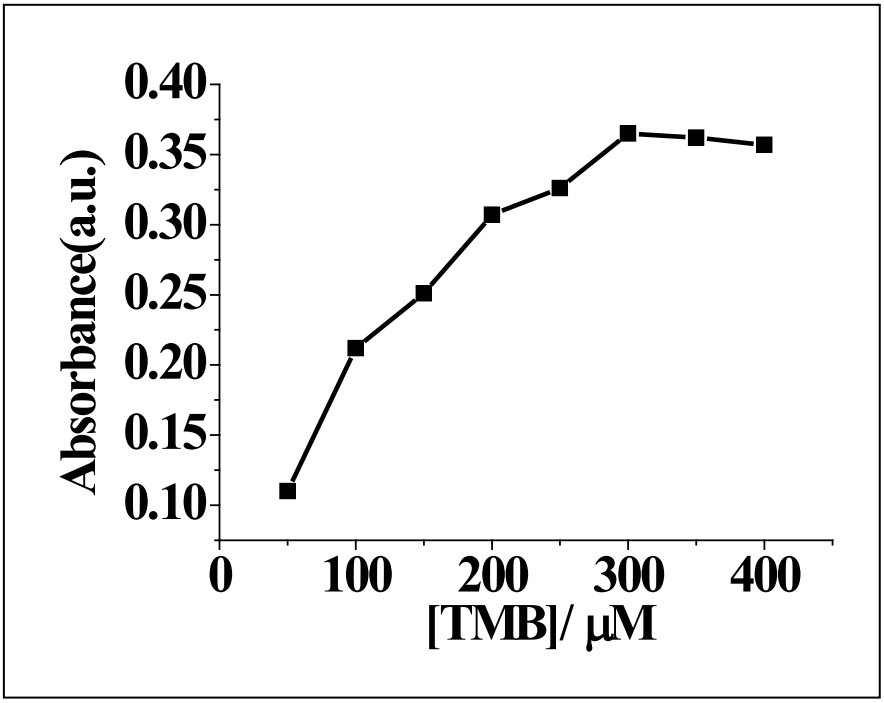

Fig. S3 The influence of the concentration of TMB on the absorbance of the system was investigated from 50-400 μM.

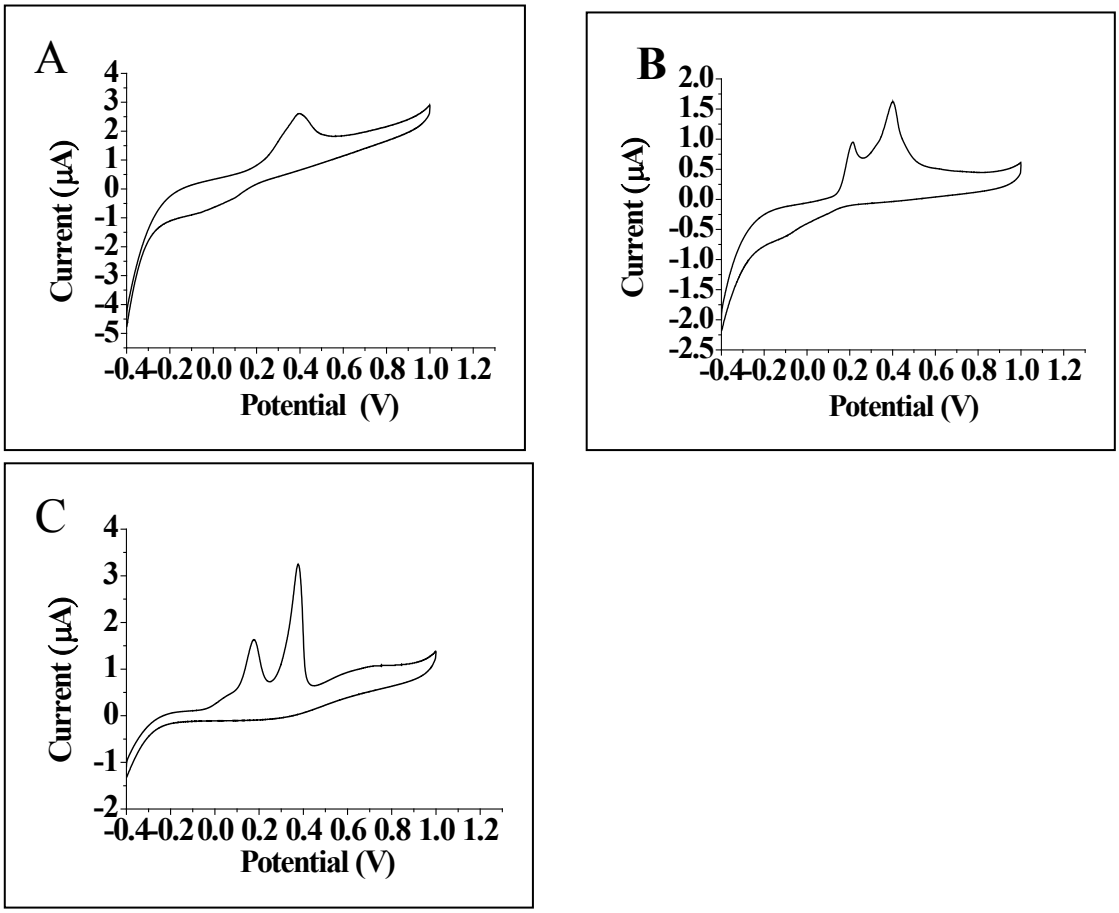

Fig. S4 Cyclic voltammograms of Cit-AgNPs (A); the mixture of Cit-AgNPs and Hg^{2+} (B); the mixture of Cit-AgNPs, Hg^{2+} and $NaBH_4$ (C).