

## Coordinating ligand functionalized AgNPs for colorimetric sensing: Effect of subtle structural and conformational change of ligand on the selectivity

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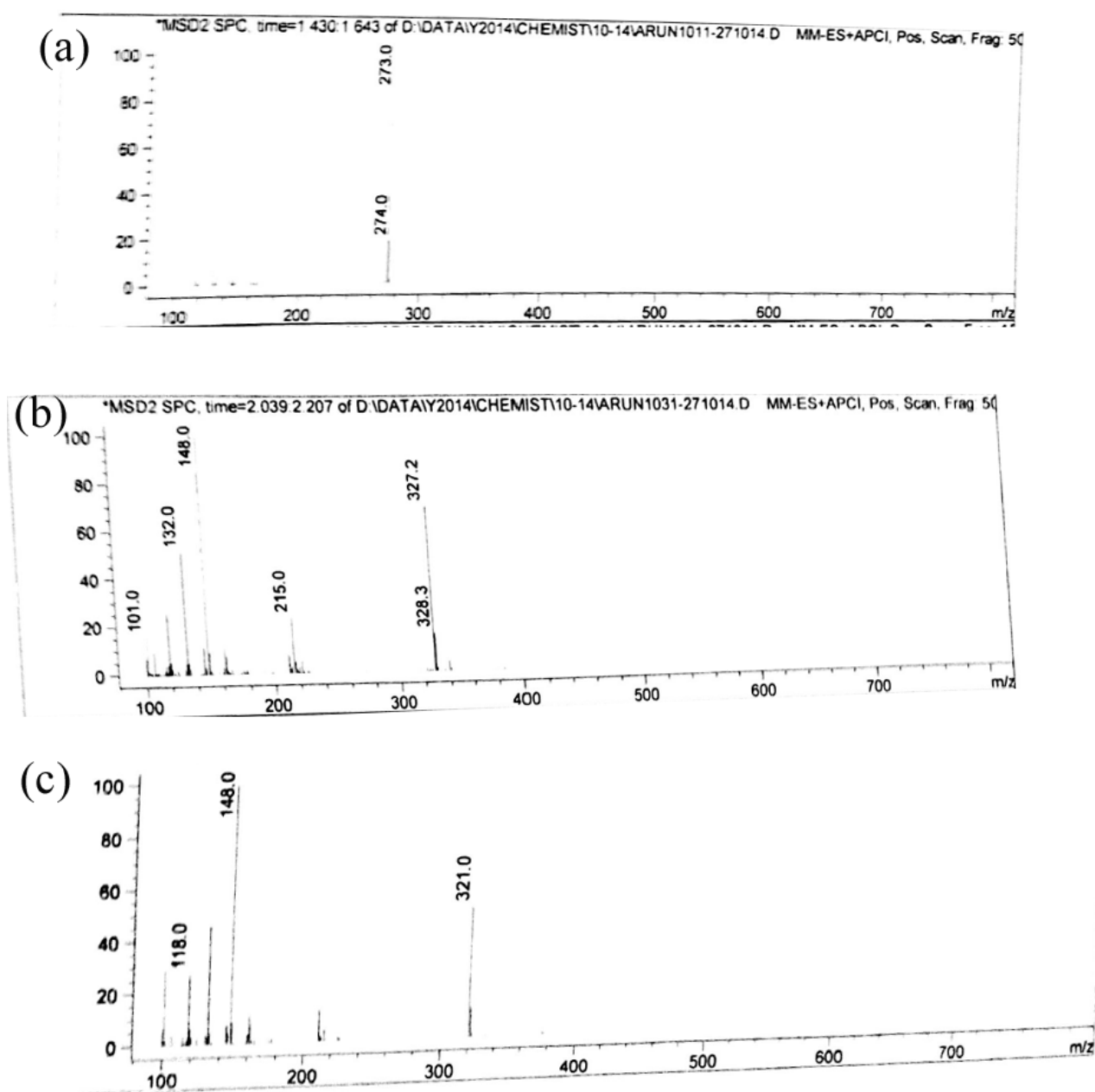


Fig. S1. LC-MS of (a) 1 (b) 2 and (c) 3.

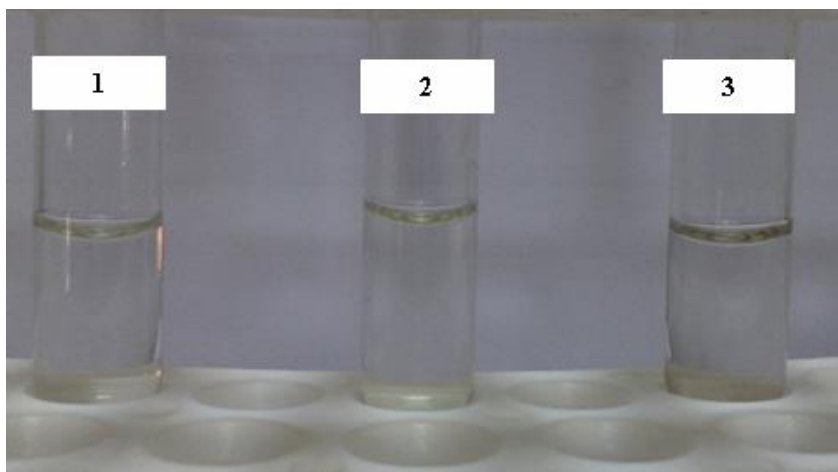


Figure S2. Digital image of 1-3 dissolved in water.

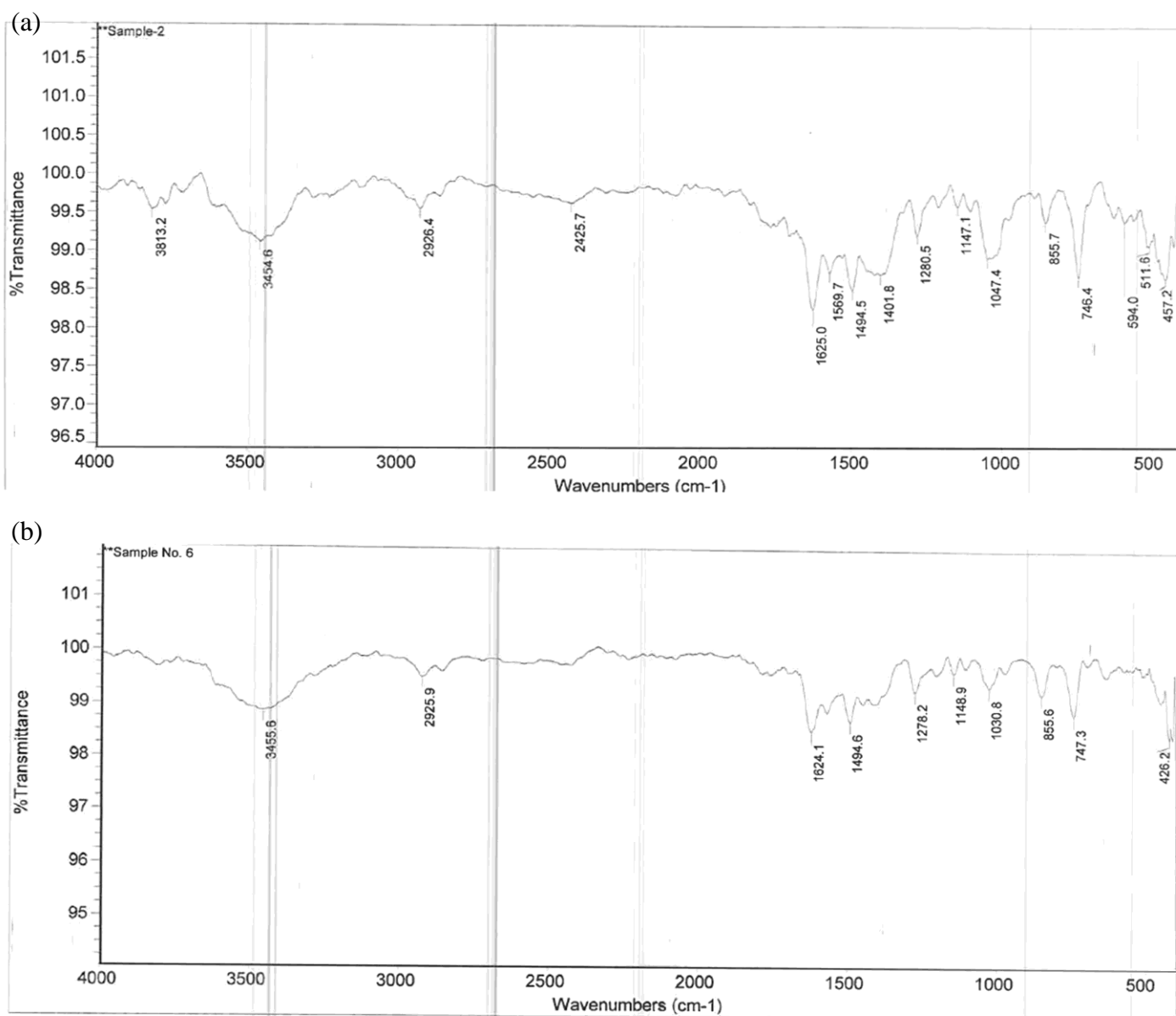


Fig. S3. FT-IR spectra 1 (a) and 1-AgNPs (b).

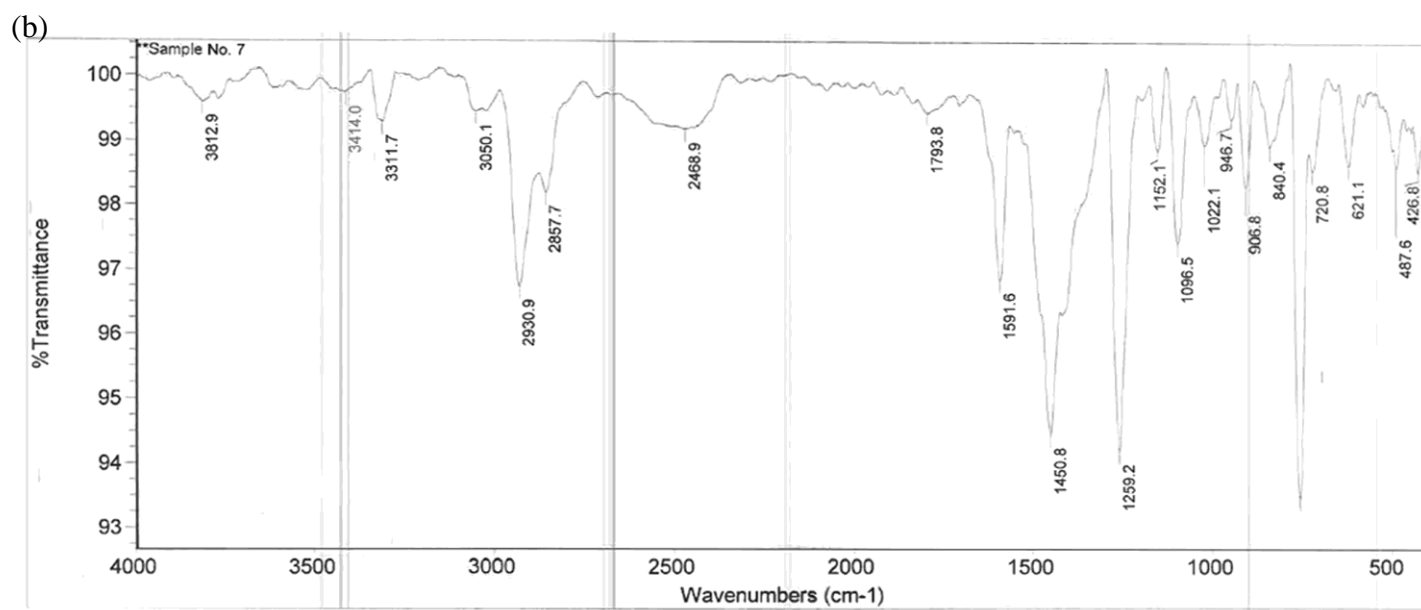
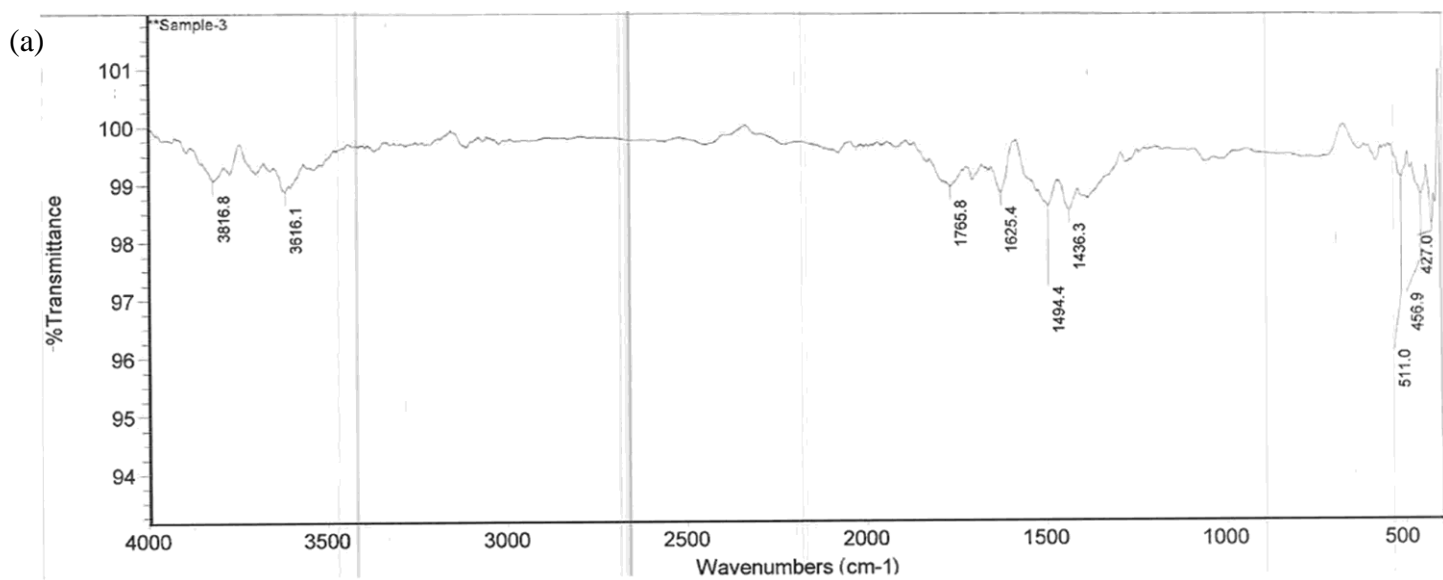


Fig. S3. FT-IR spectra 2 (a) and 2-AgNPs (b).

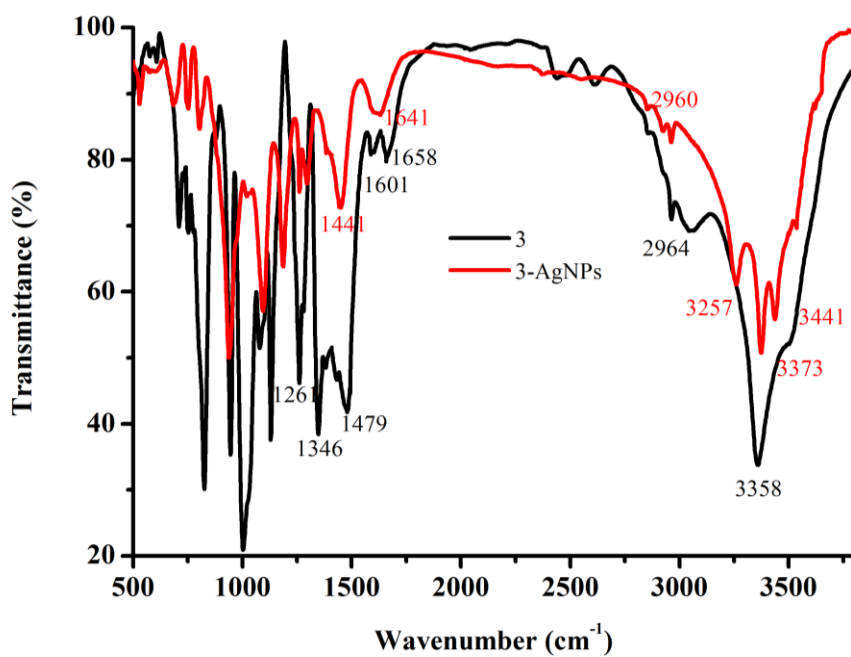


Fig. S3. FT-IR spectra 3 (a) and 3-AgNPs (b).

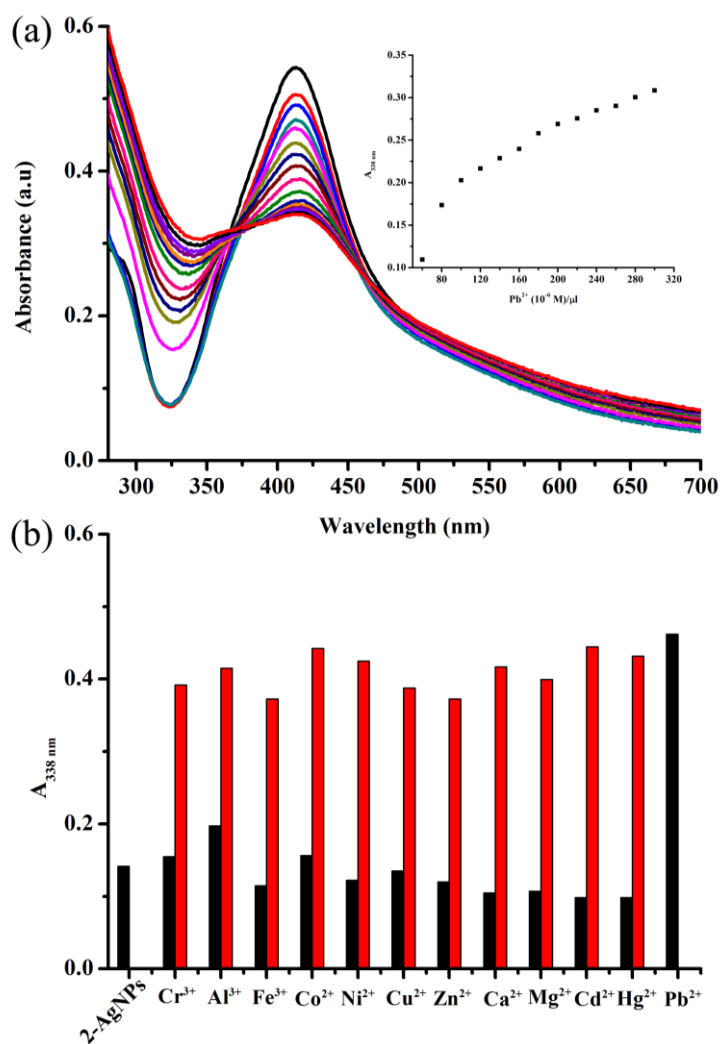


Fig. S4. Change of 2-AgNPs absorbance with  $\text{Pb}^{2+}$  concentration (a) and selectivity studies of 2-AgNPs for  $\text{Pb}^{2+}$  ( $10^{-6} \text{ M}$ ) in presence of different metal ions ( $10^{-3} \text{ M}$ ).

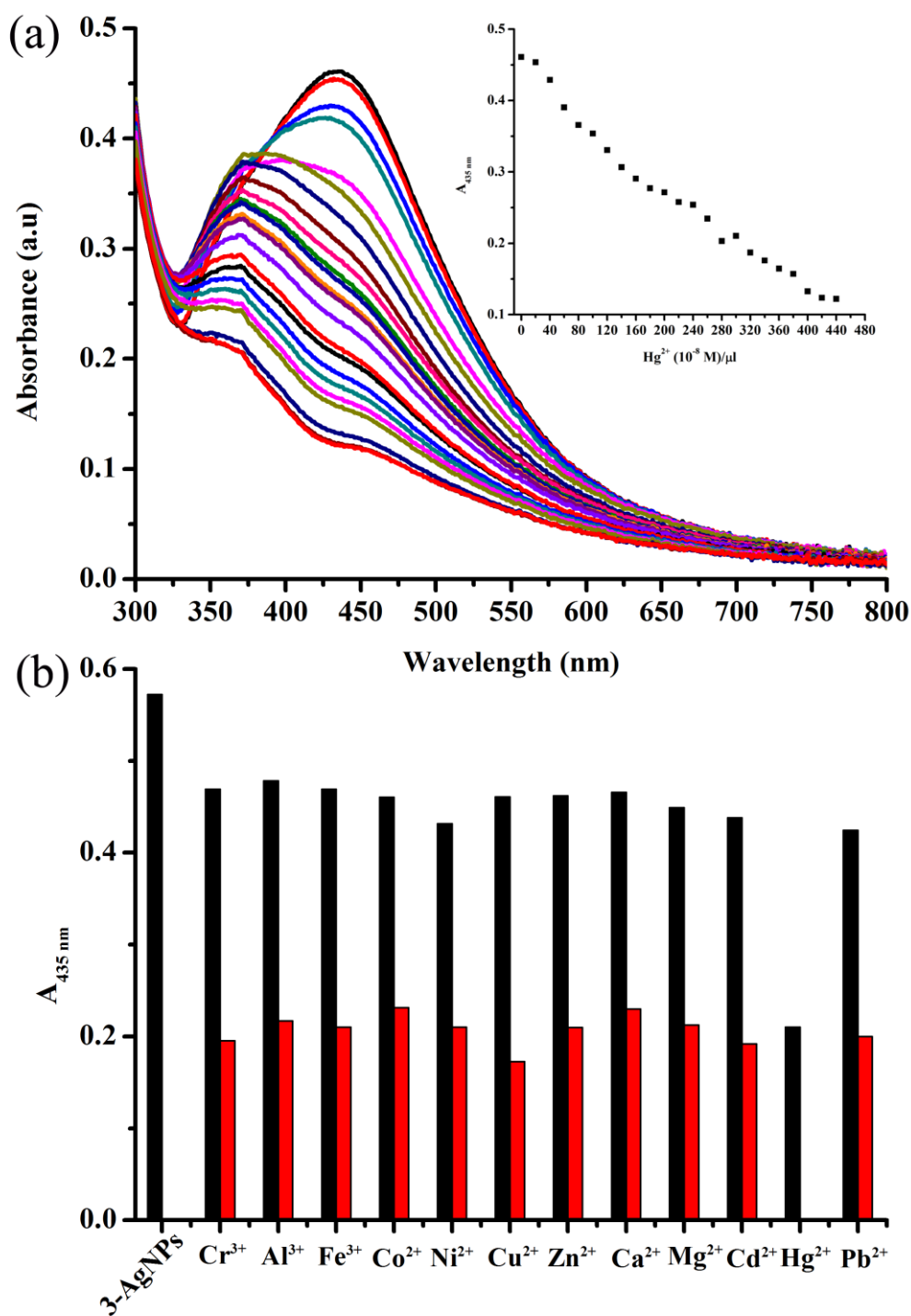


Fig. S5. Change of 3-AgNPs absorbance with  $\text{Hg}^{2+}$  concentration (a) and selectivity studies of 3-AgNPs for  $\text{Hg}^{2+}$  ( $10^{-6} \text{ M}$ ) in presence of different metal ions ( $10^{-3} \text{ M}$ ).

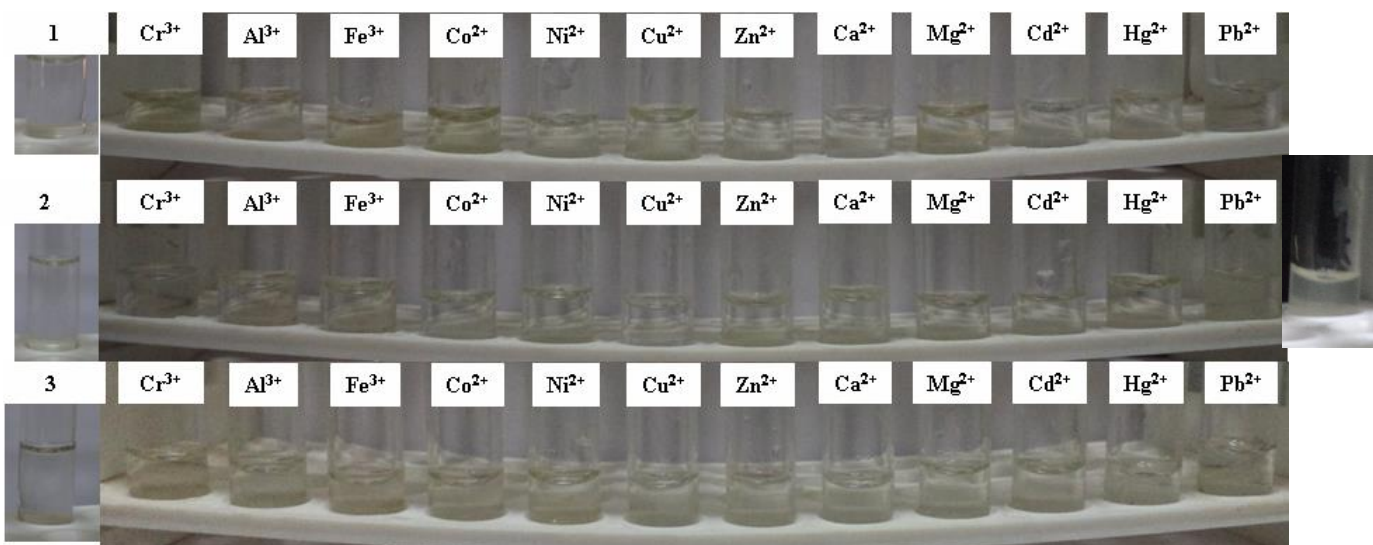


Figure S6. Digital images of 1-3 with different metal cations in aqueous solution.  $\text{Pb}^{2+}$  with 2 is shown in black background also for better clarity of turbidity.

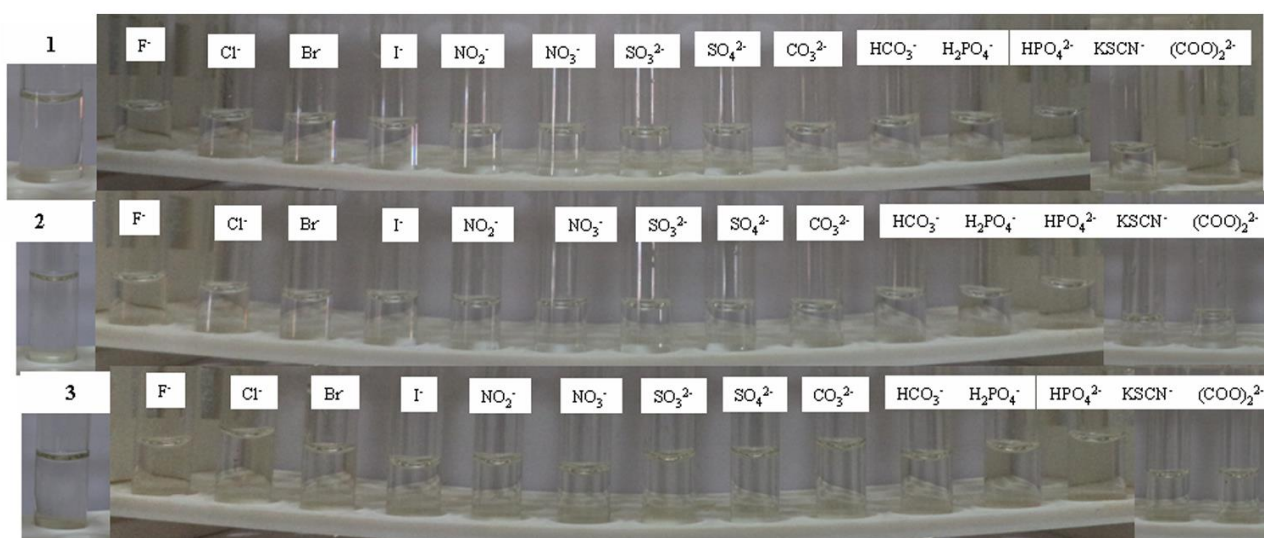


Figure S7. Digital images of 1-3 with different anions in aqueous solution.

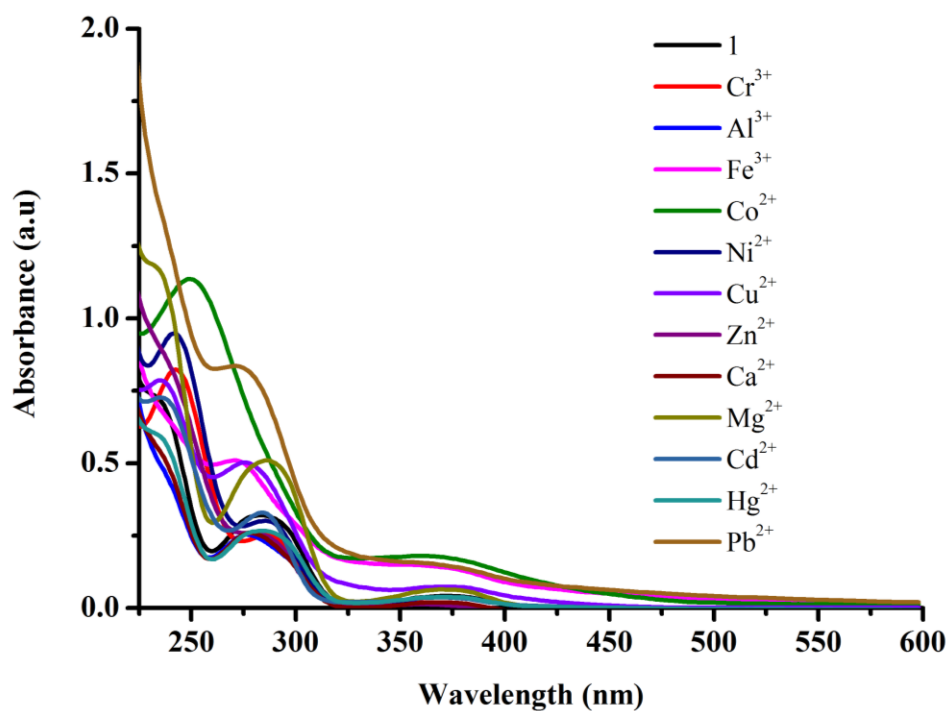


Figure S8. Absorption spectra of 1 with different cations in aqueous solution.

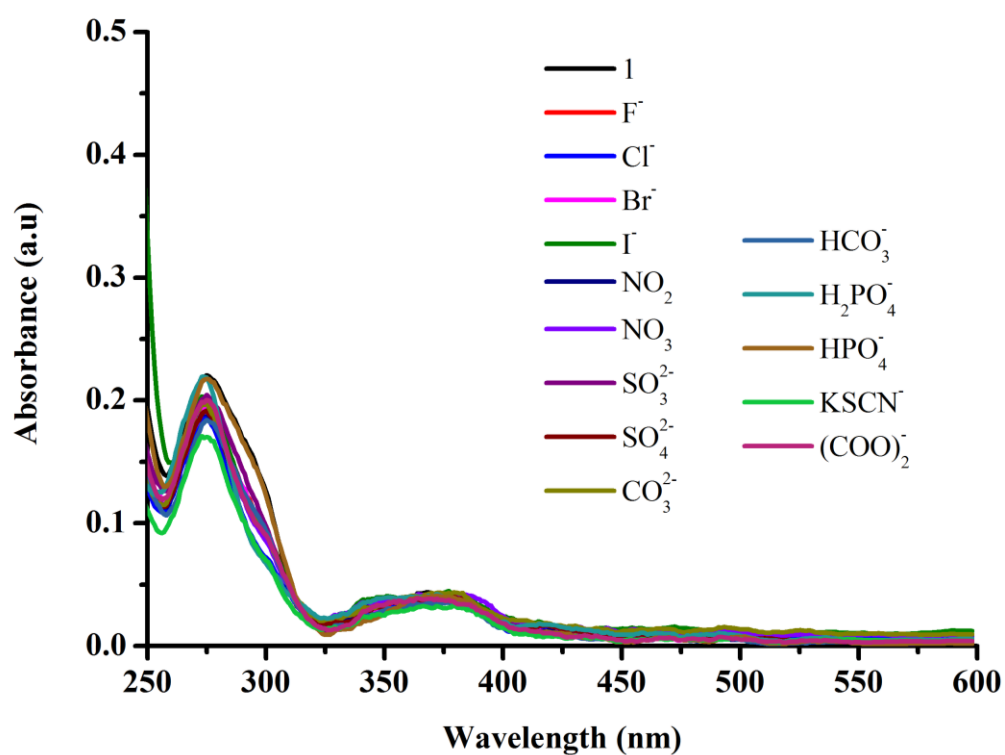


Figure S9. Absorption spectra of 1 with different anions in aqueous solution.

Table S1. Zeta potential of 1-, 2- and 3-AgNPs.

<b>Compound</b>	<b>Zeta potential (mV)</b>
1-AgNPs	-24.6
2-AgNPs	-23.7
3-AgNPs	-4.8