Article

Selective Colorimetric Detection of Pb(II) Ions by Using Green Synthesized Gold Nanoparticles with Orange Peel Extract

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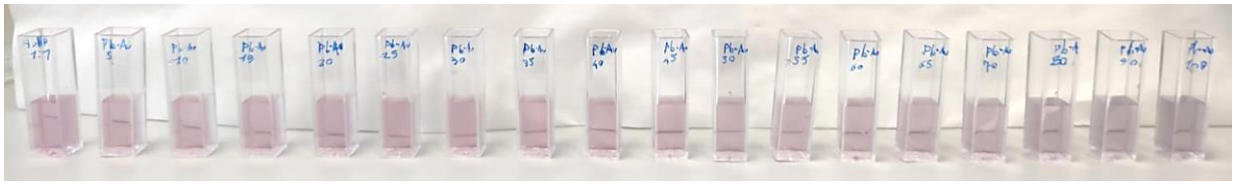

Figure S1. Sample image of AuNPs@OPE with increasing concentration of Pb^{2+} ions up to 58 μM.

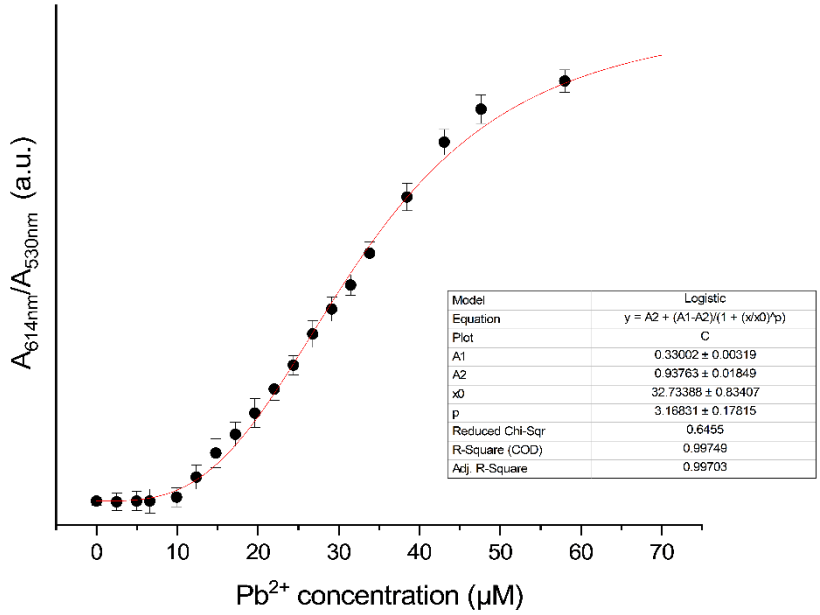

Figure S2. Fitting of the sigmoidal curve by logistic equation.

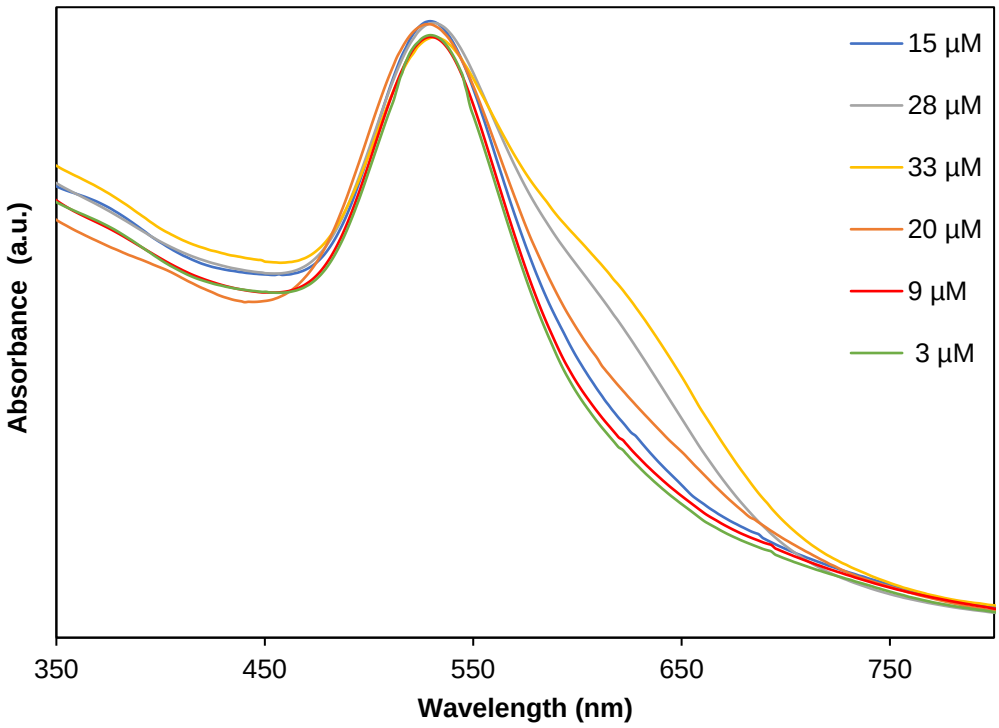

Figure S3 UV-Vis spectra of AuNPs@OPE with different spiked concentrations of Pb^{2+} using drinking water samples.

Table S1 Cations, anions and pH of the drinking waters used for the colorimetric assay of Pb^{2+} using AuNPs@OPE

Cations by ICP-MS	**Sample 1 (mg/L)**	**Sample 2 (mg/L)**
Li	0.041	0.022
Na	64.628	4.912
K	35.210	1.202
Ca	189.530	85.614
Mg	21.740	5.452
Sr	1.110	0.128
Fe	0.56	0.007
Al	0.035	0.002
Ba	0.080	0.01
Mn	0.005	0.5
Anions by Ionic cromatography		
F^-	1.318	5.002
Cl^-	38.665	6.202
HCO_3^-	731.00	220.126
SO_4^{2-}	60.874	3.612
NO_3^-	20.085	45.021
pH	6.52	7.31