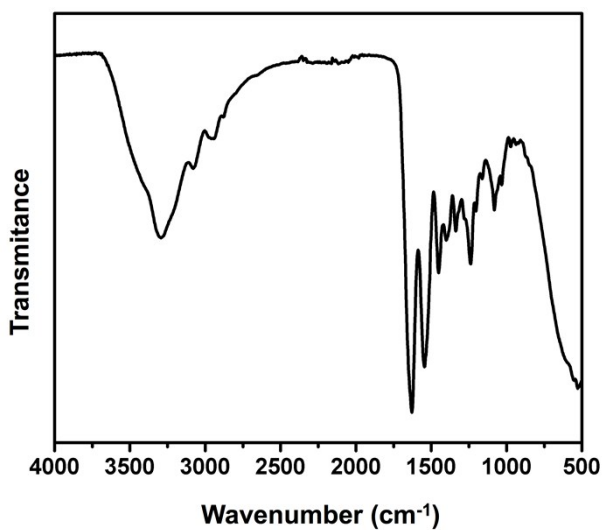
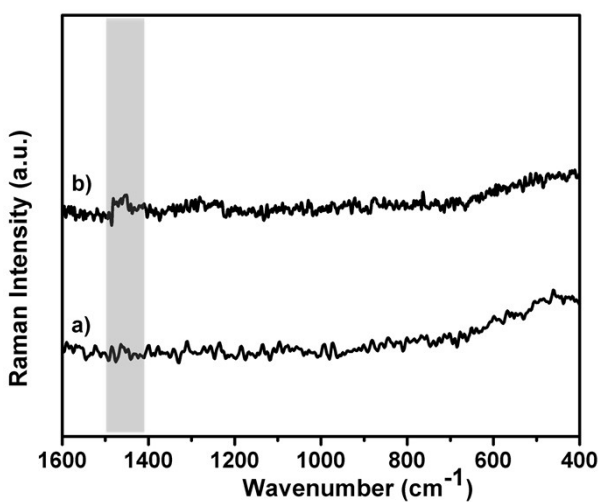


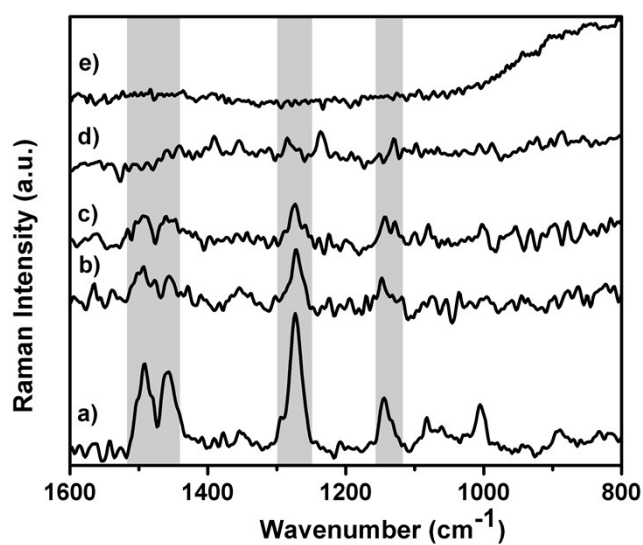
Supporting Information



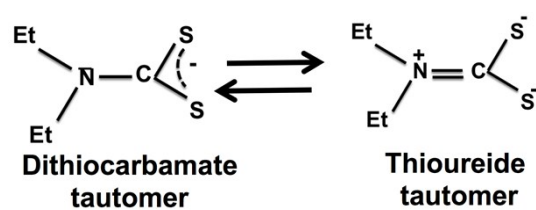
S1: ATR-FTIR spectra of lyophilized of the nanocomposite with gelatine A 50g/L and Ag NPs prepared by the borohydride method.



S2: Raman spectra of a) Gelatine A 10 g/L; b) Ag/GelA_10.



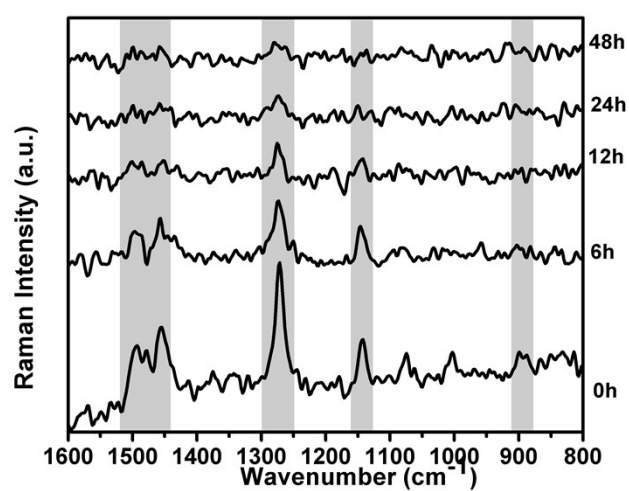
S3: SERS spectra of EtDTC on Ag/Gel A10 for distinct final concentrations: a) 10^{-3} M; b) 10^{-4} M; c) 10^{-5} M; d) 10^{-6} M; e) 10^{-7} M.



S4: Scheme showing the tautomeric forms of diethyldithiocarbamate.

S5: Absorbance values at different wavelength of pure Gelatine A with different concentrations

	Ag/Gel A 10g/L	Ag/Gel A 25g/L	Ag/Gel A 50g/L	Ag/Gel A 100g/L
532 nm	0.008	0.009	0.030	0.059
633 nm	0.004	0.005	0.018	0.035
1064 nm	0.000	0.002	0.003	0.004



S6: SERS spectra of EtDTC (10^{-3} M) in a Ag/GelA100 hydrogel after distinct contact times of this substrate with water.