

Functionalized Gold Nanoparticles as Biosensors for Monitoring Cellular Uptake and Localization in Normal and Tumor Prostatic Cells

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Supplementary Data

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1. DLS Measurements

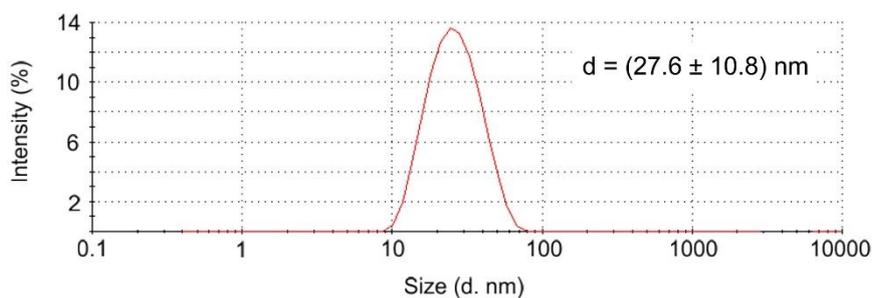


Figure S1. DLS analysis of the AuNPs colloid.

2. UV Spectroscopy

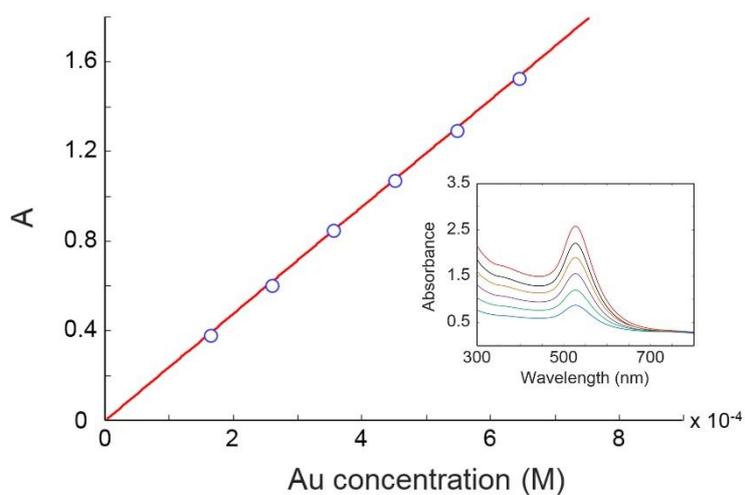


Figure S2. Absorbance vs concentration plot for AuNPs colloids. The inset displays the UV spectra of the colloids.

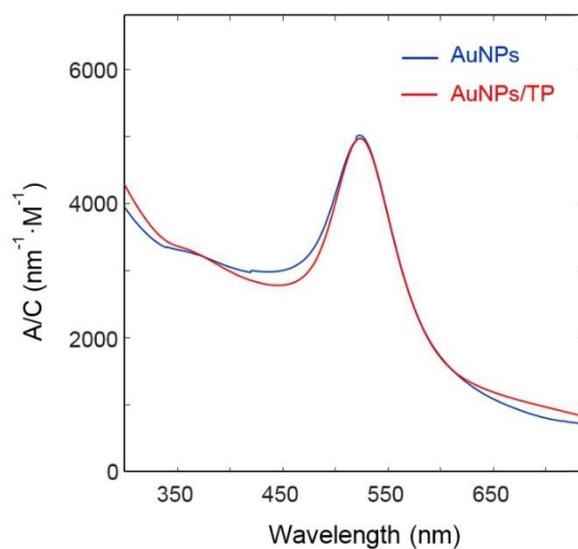


Figure S3. Comparison between the UV spectra of the AuNPs and the AuNPs/TP colloidal solutions. Absorbance values are normalized by molar concentration of nanoparticles.

3. Evaluation of the equatorial cross-section of thiophenol

The isolated thiophenol molecule was preliminary optimized at DFT/B3LYP level of theory using the standard 6-31G(d) basis set. The Van der Waals surface was then visualized and the two semi-axes, a and b , of the equatorial ellipse were measured. The molecular model, along with the relevant geometric parameters, is represented in Fig. S4.

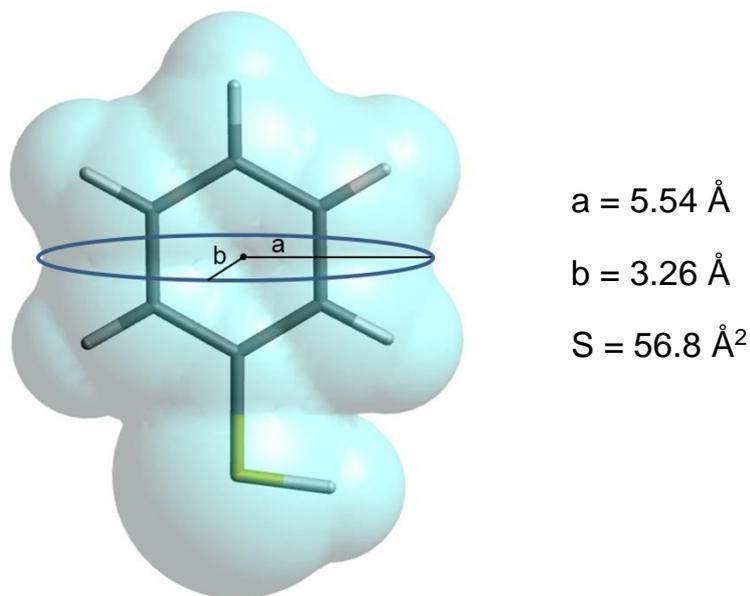


Figure S4. DFT optimized molecular structure of thiophenol, displaying the Van der Waals surface and the elliptic equatorial cross-section.