


## SUPPLEMENTARY MATERIAL

### **Estabilizando *hotspots* em nanopartículas de ouro para aplicação quantitativa da técnica SERS em sistemas bioanalíticos**

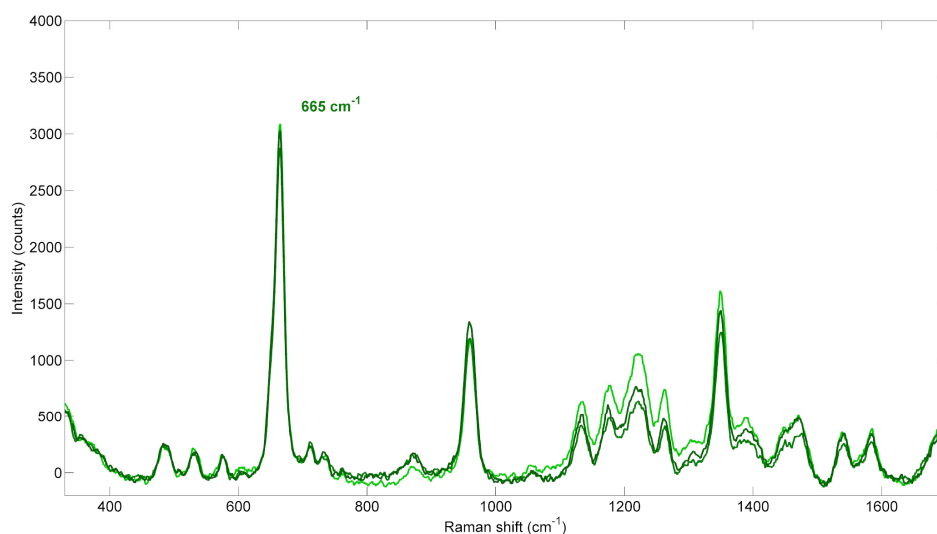
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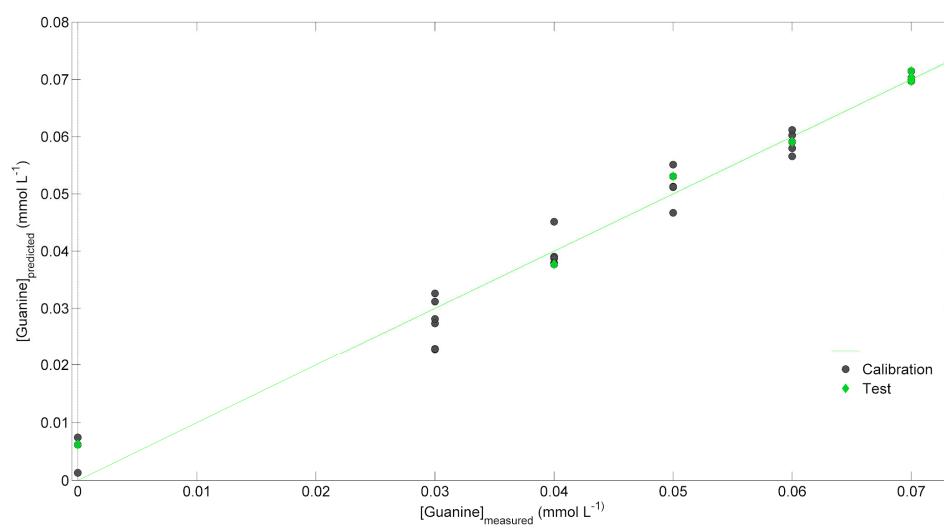
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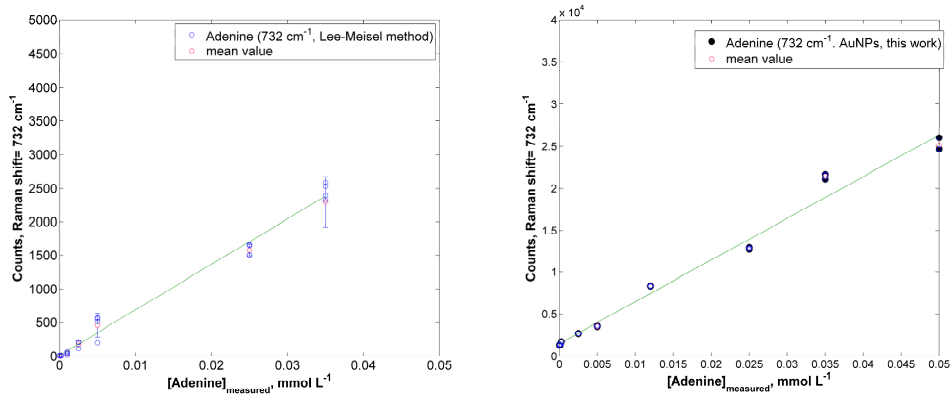
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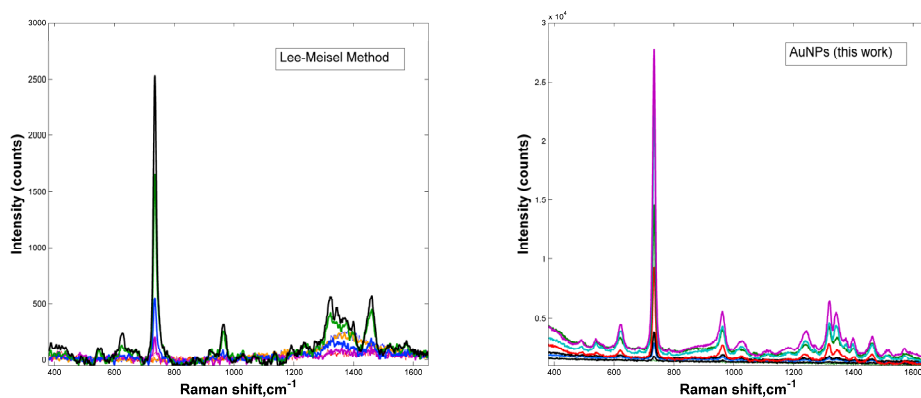
**Figure 1S.** SERS spectra for three replicates of guanine in aqueous solution obtained with stabilized AUNPs-S2. Characteristic ring breathing band at  $665\text{ cm}^{-1}$  is highlighted



**Figure 2S.** PLS model for guanine between  $0.0$  and  $0.07\text{ mmol L}^{-1}$  using stabilized AuNPs-S2. Number of LVs: 5; RMSEC: 0.00340182 ; RMSECV: 0.0138786 ; RMSEP: 0.00264811;  $R^2$  Cal: 0.971222 ;  $R^2$  CV: 0.745003 . Data preprocessing included smoothing with Savitzky-Golay filter (5 pt window) and first derivative to correct baseline



**Figure 3S.** Univariate calibration plots for band located at  $732\text{ cm}^{-1}$  and its respective error bars. Lee-Meisel method (left) and AuNPs synthesized in this work (right)



**Figure 4S.** Mean adenine SERS spectra used for PLS model using Lee-Meisel synthesis and AuNPs from this work. Adenine concentrations are varying in the ranges as in Figure 6 (main document)

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