

Electronic Supplementary Information

Interaction of L-Cysteine with *naked* gold nanoparticles supported on HOPG: A high resolution XPS investigation

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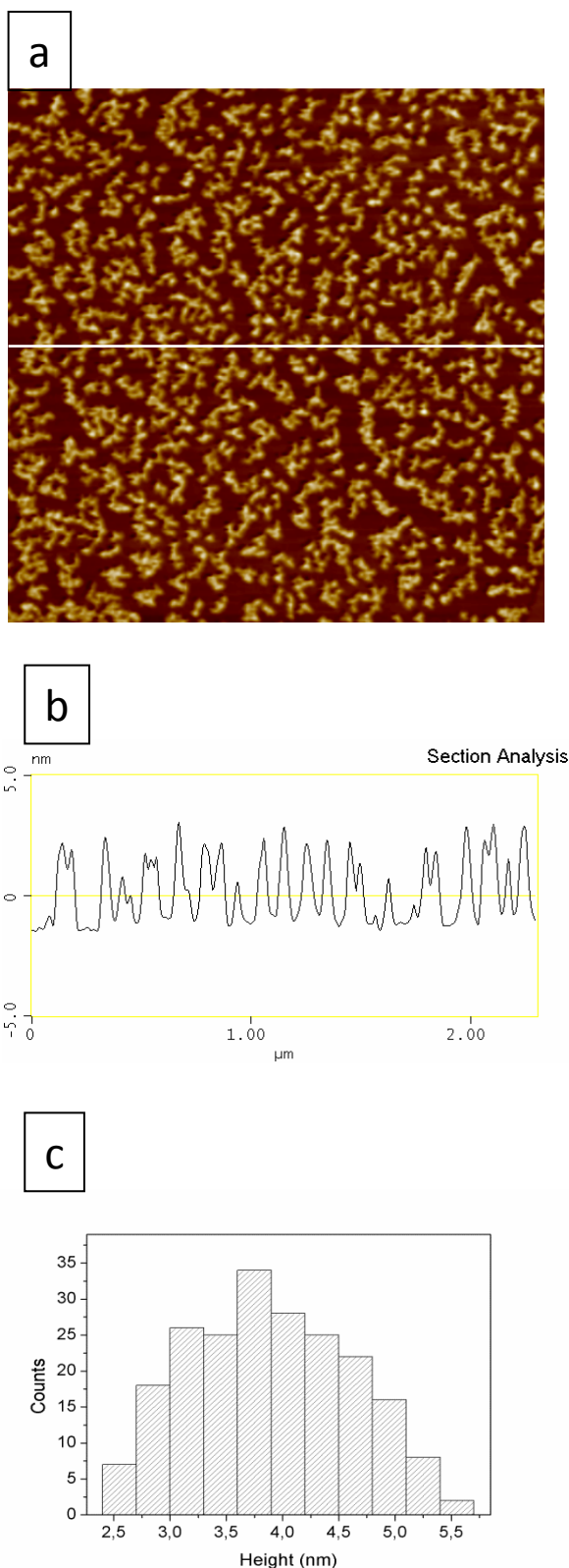


Fig.1 a) AFM (tapping mode) height image of a low coverage NP/HOPG sample. Scan size $2.3\mu\text{m} \times 2.3\mu\text{m}$, z scale 10 nm. b) example of cross section profile (along the white line in the upper panel). c) typical histogram of the nanoparticle height values obtained from the analysis of cross section profiles. A statistic analysis over several samples and several zones gives an average value of 4 nm with standard deviation of 0.5 nm.

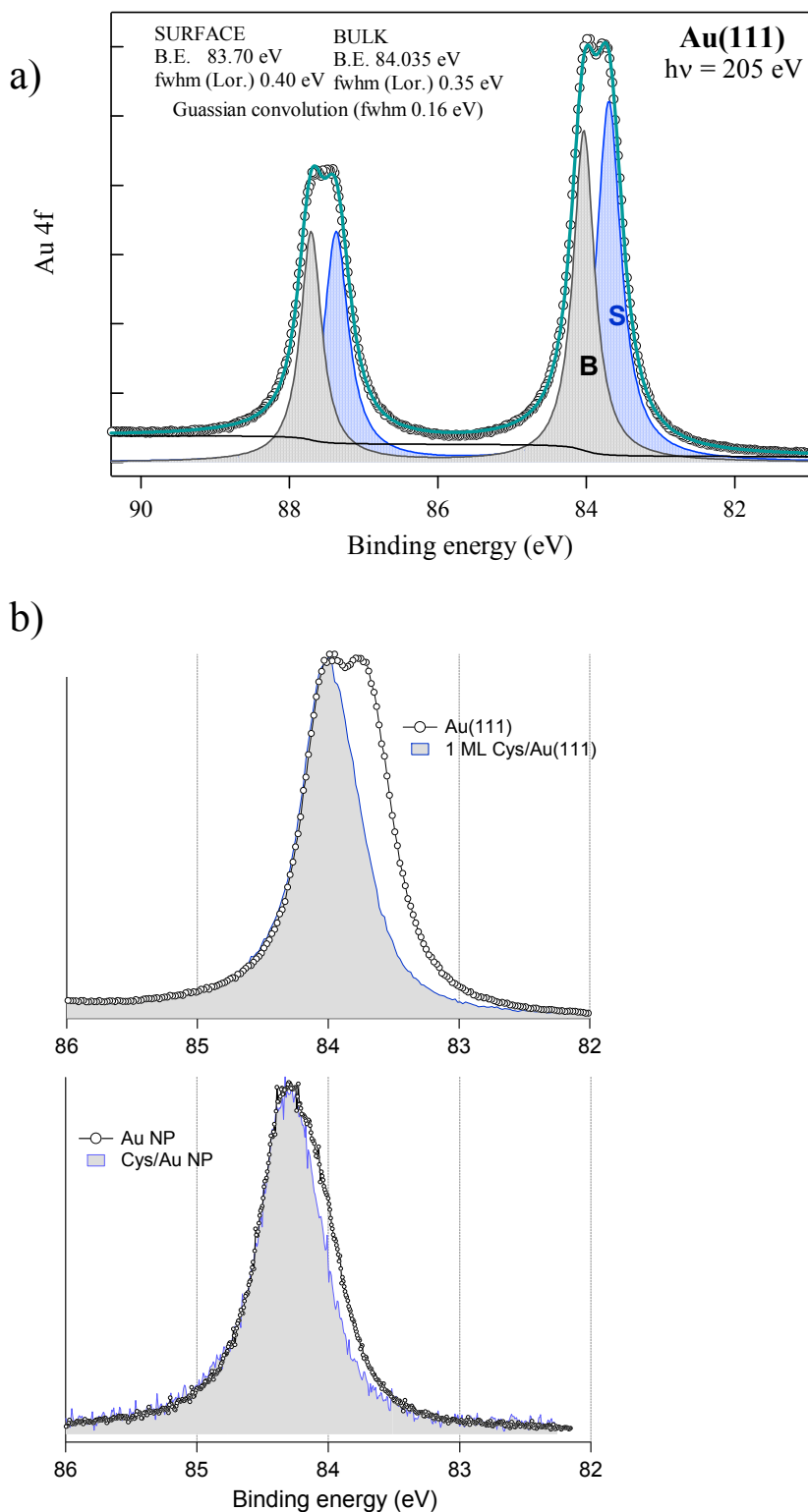


Fig.2

a) XPS Au4f measurement on Au(111) taken under conditions similar to those adopted in the paper. The fit was performed assuming two sub-components. Details on the surface (S) and bulk (B) components parameters are reported in the insets. Note that the relative intensity of the two sub-components may vary significantly with the photon energy because of photoelectron diffraction effects (see e.g. ref. [62]).

b) Comparison between Au 4f spectra measured on Au NP before and after Cys chemisorption (data of Fig. 4 of the main text). The peaks are normalized to the maximum intensity to emphasize the line shape modifications.