

## Supporting Information

for

### Assessing the plasmonics of gold nano-triangles with higher order laser modes

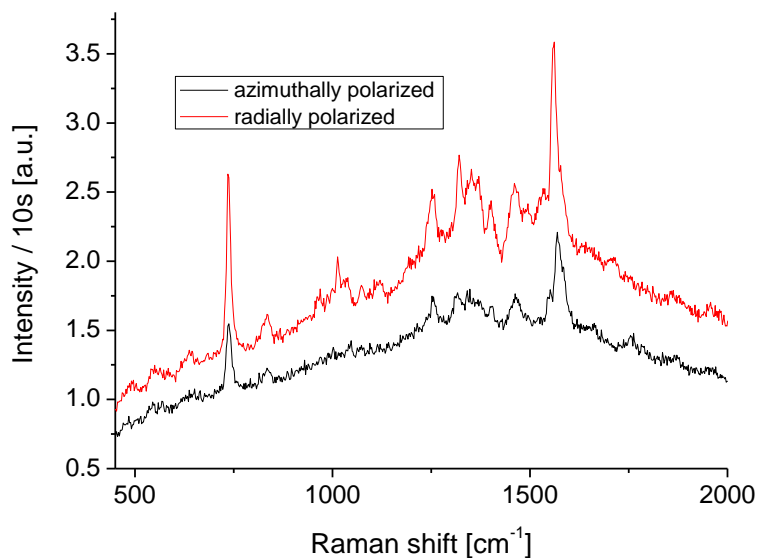
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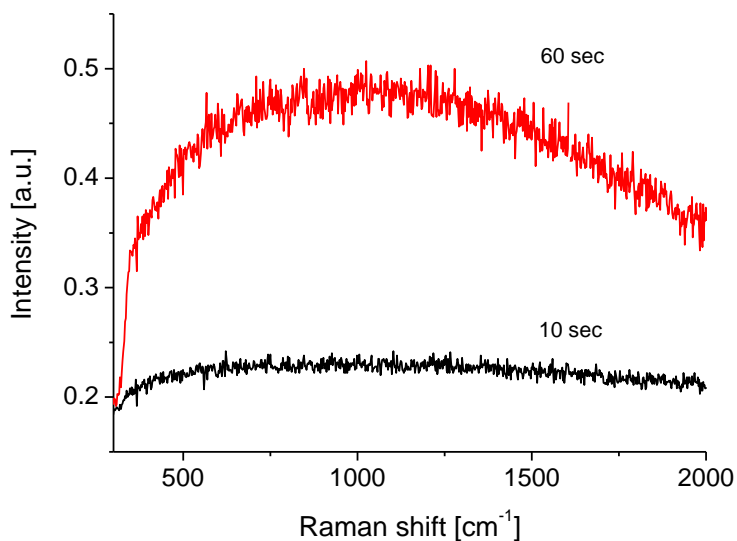
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SERS and Raman spectra of adenine molecules



**Figure S1:** SERS spectra of adenine molecules adsorbed on a gold Fischer pattern ( $L \approx 350$  nm, glass substrate). The black spectrum was collected through excitation with an azimuthally polarised laser beam. The red spectrum was collected through excitation with a radially polarised laser beam.



**Figure S2:** Raman spectra of adenine molecules adsorbed on a gold thin film using two different integration times. No obvious Raman peaks are observable due to the extremely low coverage with molecules. Both spectra were collected in radial donut mode.