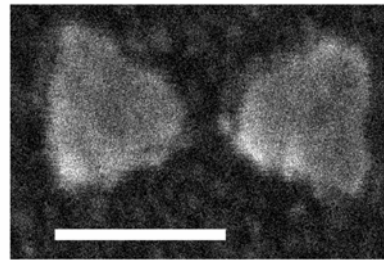
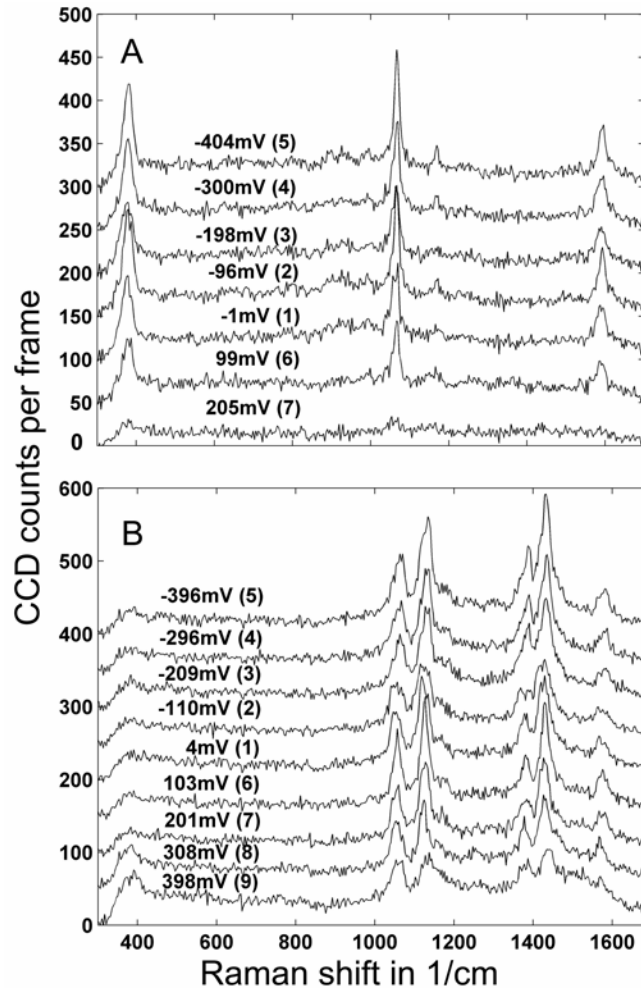
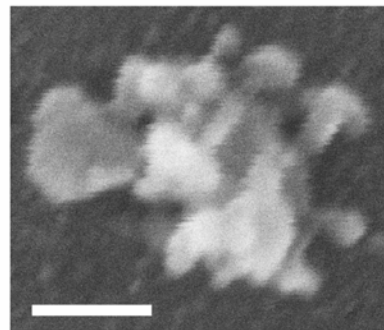


Gold bowtie nanoantennas for surface-enhanced Raman scattering under controlled electrochemical potential

F. Jäckel, A.A. Kinkhabwala, and W.E. Moerner, Chem. Phys. Lett. 446 (2007) 339-343



Electrochemical cycling



- Raman spectra of PMA monolayer are stable at low pump power, in electrolyte
- Electrochemical cycling even at low potential induces roughening of the bowtie and switches on b_2 symmetric Raman modes of the self-assembled monolayer
- In combination with FDTD calculations of local E fields, we conclude an initial face-on adsorption of the analyte