RAMAN SPECTROSCOPY

# Tipping point

Tip-enhanced Raman spectroscopy can be used to characterize the relationship between the topography and the chemical activity of individual surface sites.

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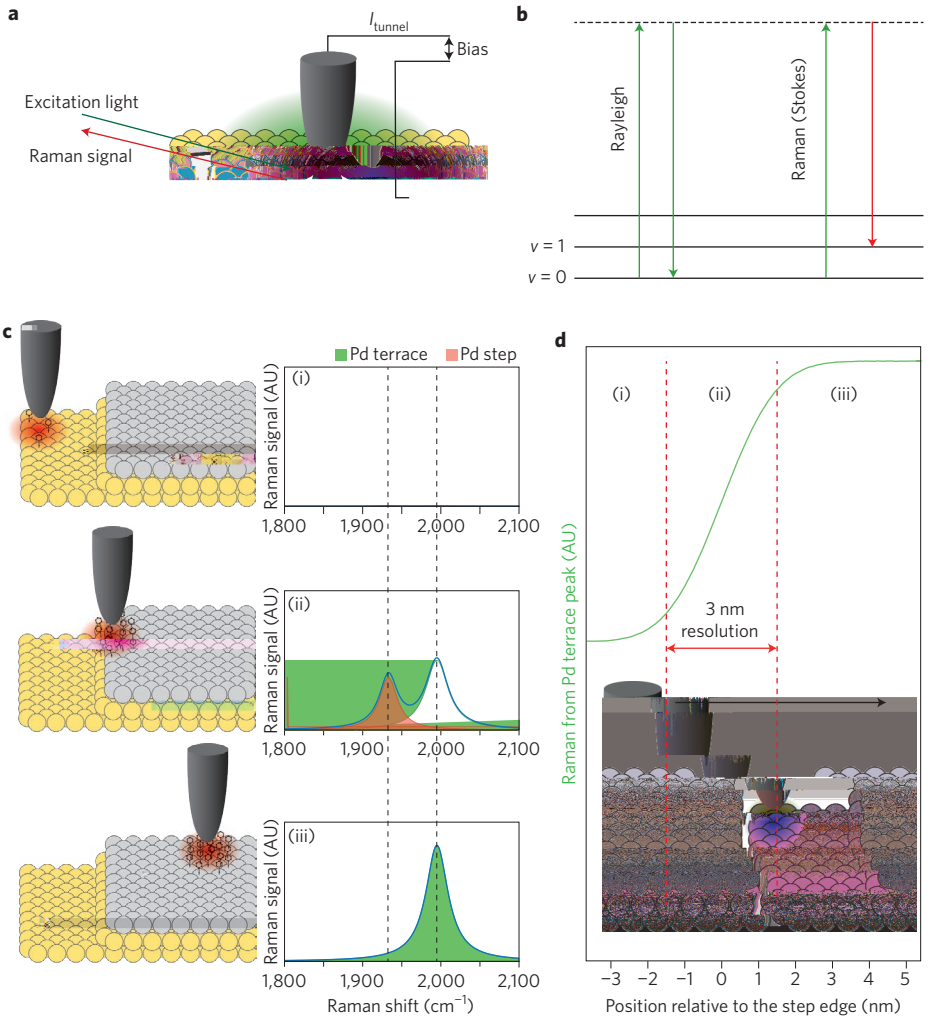


**Figure 1 |** Nanoscale resolution at a Pd/Au interface using Raman spectroscopy. **a**, Experimental setup for TERS using a scanning tunnelling microscope. The signal comes from a very small volume under the tip apex. **b**, Energy diagram for Raman scattering showing the wavelength-shifted Stokes signal. **c**, Raman spectra can reveal bands related to different surface sites originating from different adsorption geometries. **d**, TERS can be acquired at different points over the surface to provide nanoscale resolution with a rich chemical content.

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