

Self-Assembled Gold Nanoparticles for Molecule Sensing

Researchers around James Rice from Dublin, Ireland, are using self-assembled, highly ordered structures of gold nanoparticles to demonstrate molecule sensing at ultralow concentrations and excitation powers. The team uses surface enhanced Raman scattering (SERS) in the presence of the Au nanoparticles and perform microscopic Raman spectroscopy and imaging.

Featured Paper/ Publication: [Single-Molecule Nonresonant Wide-Field Surface-Enhanced Raman Scattering from Ferroelectrically Defined Au Nanoparticle Microarrays](#), ACS Omega, 2018

Reference Lab: [James Rice](#), University College Dublin, Ireland

Products used: [Isoplane](#), [ProEM](#)