Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics

SERS from a Two-Tier Sphere Segment Void Substrates

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Supplementary Data

Optical Measurements

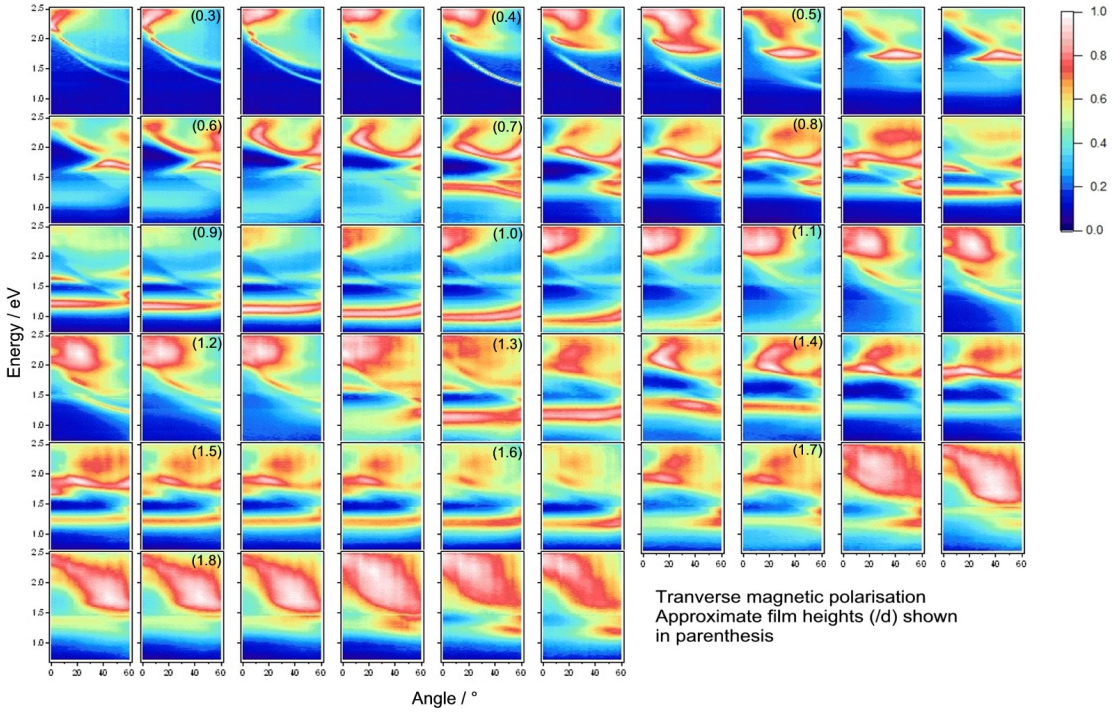

Figure 1. Angle resolved reflectance maps showing absorption as a function of plasmon energy and collection angle. White is strongest absorption, blue is weakest absorption. Film thickness increases left to right and top to bottom. The approximate film height is given in the parenthesis. Transverse magnetic polarisation TM = 0. Gold film, 600 nm bilayer sphere template.

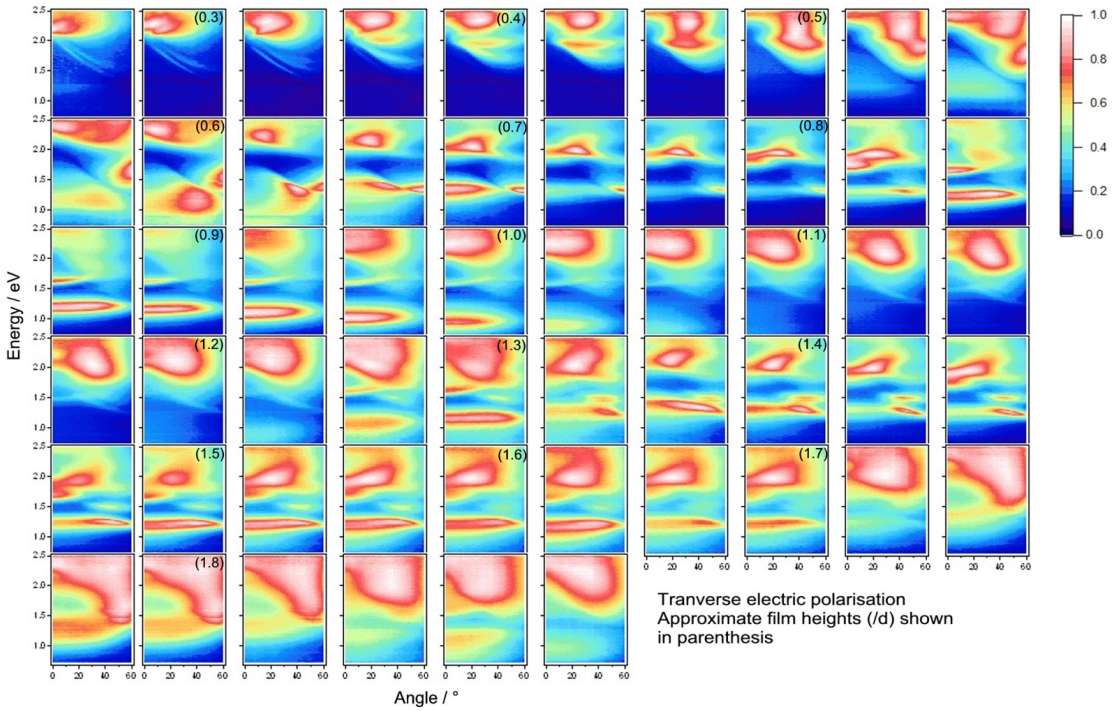

Figure 2. Angle resolved reflectance maps showing absorption as a function of plasmon energy and collection angle. White is strongest absorption, blue is weakest absorption. Film thickness increases left to right and top to bottom. The approximate film height is given in the parenthesis. Transverse electric polarisation TE = 0. Gold film, 600 nm bilayer sphere template.

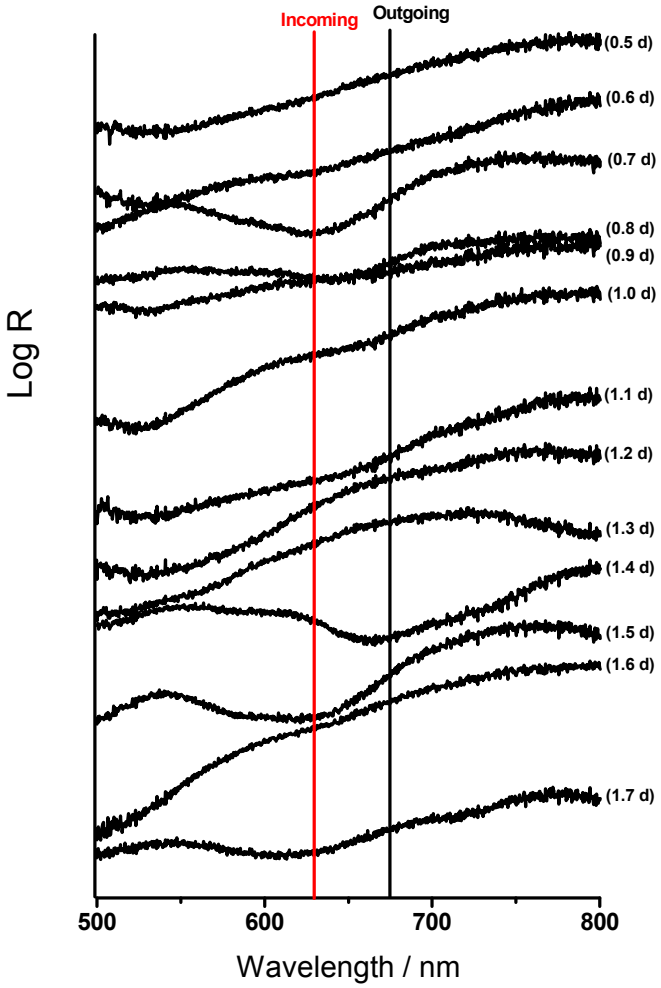

Figure 3. Normal incidence reflection spectra showing key adsorption/reflection properties of a two tier spherical cavity substrate as a function of film height. Spectra are offset for clarity, and normalised with respect to flat gold.