UV PL Low Temp. with Mapping/ RAMAN

Model: LabRAM HR 800 Evo Raman Spectrometer, Horiba, France

Raman Spectroscopy is a non-destructive chemical analysis technique which provides detailed information about chemical structure, phase and polymorph, crystallinity, and molecular interactions. It is based upon the interaction of light with the chemical bonds within a material\(^1\). The LabRAM HR800 is suitable for both micro and macro measurements and offers advanced confocal Raman imaging capabilities in 2D and 3D in the range from near IR to UV. The spatial resolution can be achieved about 300 nm for 514 nm laser for XY directions and 600 nm for Z directions. Minimum spectral resolution around 0.3/cm can be achieved for 514 nm laser. The motorized pass filter selector enables 3 laser wavelengths, 325 nm, 514 nm, and 785nm. More features such as 800 mm spectrograph for high resolution,

\(^1\)https://www.horiba.com/usa/raman-imaging-and-spectroscopy/#:~:text=Raman%20Spectroscopy%20is%20a%20non,chemical%20bonds%20within%20a%20material.
three gratings of 300, 600, and 1800 for different spectral range and spectral resolution, heating/cooling stage for temperature range from -196°C to 600°C and microscope objectives with 10X, 50X, 100X and 40X far field are available².

²https://www.horiba.com/int/products/detail/action/show/Product/labram-hr-evolution-1083/