

Resource Summary Report

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Arizona State University Knowledge Enterprise Research Computing: Raman Spectrometer

RRID:SCR_028603

Type: Tool

Proper Citation

Arizona State University Knowledge Enterprise Research Computing: Raman Spectrometer (RRID:SCR_028603)

Resource Information

URL: <https://cores.research.asu.edu/materials/equipment/raman-spectrometer-custom-built-multi-wavelengths>

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Description: Micro-Raman Spectrometer uses a fingerprint technique to identify materials based on vibrations. Its sensitivity can give information on composition and strain. Capabilities: 4 lasers: 355nm, 532 nm, 633nm and 785 nm. Spatial resolution: ~ 0.5 microns. Spectral resolution: 1 cm⁻¹. 2 spectrometers: depending on applications: 750 mm visible. 328 mm visible and Near IR optimized Si detector. (New 2025) Can collect down to 5 cm⁻¹ with 532nm laser. Polarization control (both incident laser (including circularly polarized incident laser and signal). Raman mapping capabilities (New high-resolution stage installed in 2017). Photoluminescence from 400nm to ~1000nm. No or minimal sample preparation: Nondestructive. Works for most liquid, gas or solid. Pure phase, multi-phases, glasses, single crystals and even artwork, such as paintings. Some applications: Phase identification (compare to a published spectrum/ standard) investigate small chemical/structural. Strain/defects in some material. Sample mapping. In situ characterization at high pressure and or temperature or within a medium.

Resource Type: instrument resource

Keywords: Micro-Raman Spectrometer, spectrometer, custom build,

Resource Name: Arizona State University Knowledge Enterprise Research Computing: Raman Spectrometer

Resource ID: SCR_028603

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Ratings and Alerts

No rating or validation information has been found for Arizona State University Knowledge Enterprise Research Computing: Raman Spectrometer.

No alerts have been found for Arizona State University Knowledge Enterprise Research Computing: Raman Spectrometer.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.