

ATOMIC FORCE MICROSCOPY (AFM)

MANUFACTURER : Bruker

MODEL : Icon Fast Scan, Multi-Mode 8, Nano-IR2, ALPHA300

Samples

- Sample size: maximum 101 mm (4")
- Thickness: maximum 12.7 mm (0.5")
- Open geometry

Analysis

- Modes: Contact mode, Tapping mode, Lateral Force Microscopy (LFM), Magnetic Force Microscopy (MFM), Scanning Tunnel Microscopy (STM), Peak Force QNM, Peak Force TUNA, Kelvin Probe Microscopy, AFM-IR, AFM-Raman
- Topographical measurements: quantitative
- Measurement of viscoelastic and Adhesion properties: qualitative & quantitative
- Mapping possible
- Lateral resolution: 2 nm

Applications

- Measurements of topography in ambient, liquid environments and under Argon
- Measurements of mechanical properties (adhesion, Modulus)
- Measurement of friction
- Measurement of roughness
- Measurement of magnetic field gradients
- Measurement of electrical fields gradients
- Measurement of tip/surface interaction force
- Measurement of localized conductivity
- Measurement of surface potential (Kelvin Probe Microscopy)
- Topographic AFM image correlated with IR Mapping
- Topographic AFM image correlated with Raman Mapping