

**LIST OF EQUIPMENT AND THEIR FUNCTIONS IN 42-
111 NANOTECHNOLOGY MEASUREMENT LAB**





IMAGE OF EQUIPMENT	EQUIPMENT NAME	EQUIPMENT FUNCTION
	NanoSurf NaioAFM	An atomic force microscope that can measure the topography and several other properties of a sample with nanometer resolution.
	NanoSurf Naio STM	Scanning tunneling microscope allows students to study objects at the atomic level.
	SEMICONSOFT MProbe thin film measurement	Uses spectral reflectance to measure the thickness of thin films in the nano to micro scale.
	Micromanipulator Microscope	Used for getting a magnified view of objects.




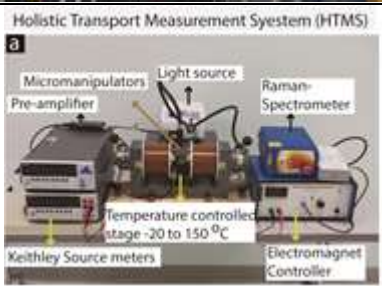



IMAGE OF EQUIPMENT	EQUIPMENT NAME	EQUIPMENT FUNCTION
	Keithley Source meter 4200	This equipment conducts current-voltage studies to fA sensitivity and capacitance measurement.
	Keithley 6430 Source Meter	I-V measurement upto femto amp level precision.
	Low temperature current-voltage measurement system	Measure transport properties up to 4K.
 <p>Holistic Transport Measurement System (HTMS)</p> <p>Micromanipulators, Light source, Raman-Spectrometer, Pre-amplifier, Temperature controlled stage -20 to 150 °C, Keithley Source meters, Electromagnet Controller</p>	Holistic Transport measurement System	This integrated system is designed to conduct current-voltage studies as a function of temperature, magnetic field, and variable wavelength light. We plan to do Raman spectroscopy along with current-voltage studies in some cases.

IMAGE OF EQUIPMENT	EQUIPMENT NAME	EQUIPMENT FUNCTION
	Phenom-XLSEM	Microscopy with am Components.
	Bruker 400 MHz NMR	Molecule characterization.
	FTIR	Molecule synthesis.