

LABORATORY TESTING SERVICES

Sample Testing—Fee Schedule—2019

<u>Nomenclature</u>	<u>Sub-Nanometer Resolution Measurement Solutions</u>	<u>Price Range</u>
		\$1,750 to \$3,275
ARP—TNS 01	3D imaging with spectral analysis of Molecular Resonances	Call
ARP—TNS 02	Sub-surface imaging measurements and spectral analysis of all Molecular Resonances	Call
ARP—TNS 03	Lattice imaging measurement with , 1 Å Resolution	Call
ARP—TNS 04	Spectral analysis sensitivity to Molecular Architecture	Call

Sample Characteristics

(No sample preparation required— sample may be any material shape for horizontal or vertical orientation)

Glass Slide, Wafer die, Fine powder solution, Slab plate, Solid material, Nanoslurry (liquid)

Sample Measurements

Resistive modeling, Doping concentration modeling, Nano particle size, distribution, & analysis, Deep level spectroscopy.

Sample Turnaround Time

Normal (Typically less than 3 days)



Applied Research & Photonics, Inc. (ARP) manufactures THz metrology tools for microscale-to-lattice scale analysis.

ARP Labs provides expertise and analytical capability to solve most material measurement objectives.

We also offer product analysis and perform contract research in semiconductors and nanotechnology.

Contact us to see how we can help solve your material problems.

ARP Labs
470 Friendship Road
Suite 10
Harrisburg, PA 17111
(717) 623-8201
info@arphotronics.net
www.arphotronics.net

Terms and Conditions - Net 30 days

Price and specifications subject to change. Instrument purchase credit allowance - half cost of analyses.

Quotation requests are welcomed.



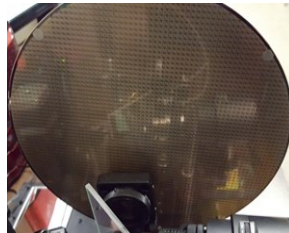
Applied Research & Photonics, Inc. (ARP)
 manufacturers microscopy metrology tools for
 microscale-to-lattice scale analysis.

Sample Characteristics

Glass Slide with a spot made from buckyball solution



Pattern wafer with die



Fine powder solution



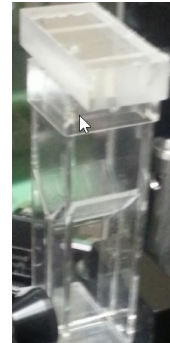
Slab plate mounted on nanoscanner



Solid material—A metal strip mounted for lattice imaging

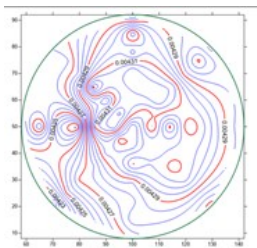


Nanoslurry in a cuvette

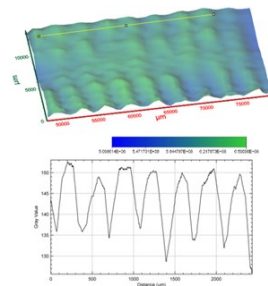


Sample Measurements

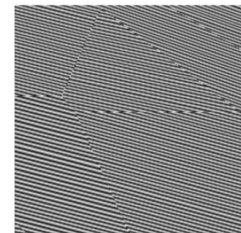
Resistive modeling contour plot of a Si <100> blank wafer for local electrical characterization



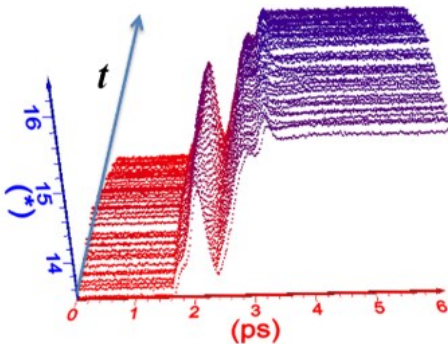
Surface roughness measurements



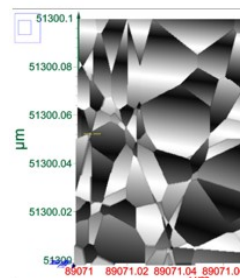
Lattice Spacing of graphene film spun on silicon wafer (5 nm x 5 nm). Nanograin



Deep-level spectroscopy of minute changes
 t = 0 nm at surface, Ge / t = 600 nm at Si <100>



Nano particle size analysis



Non-destructive, nano-scale testing to <1 Å feature on and under the surface of a wafer

