1. Multi-Functional Atomic Force Microscope-Atom Edge Pro

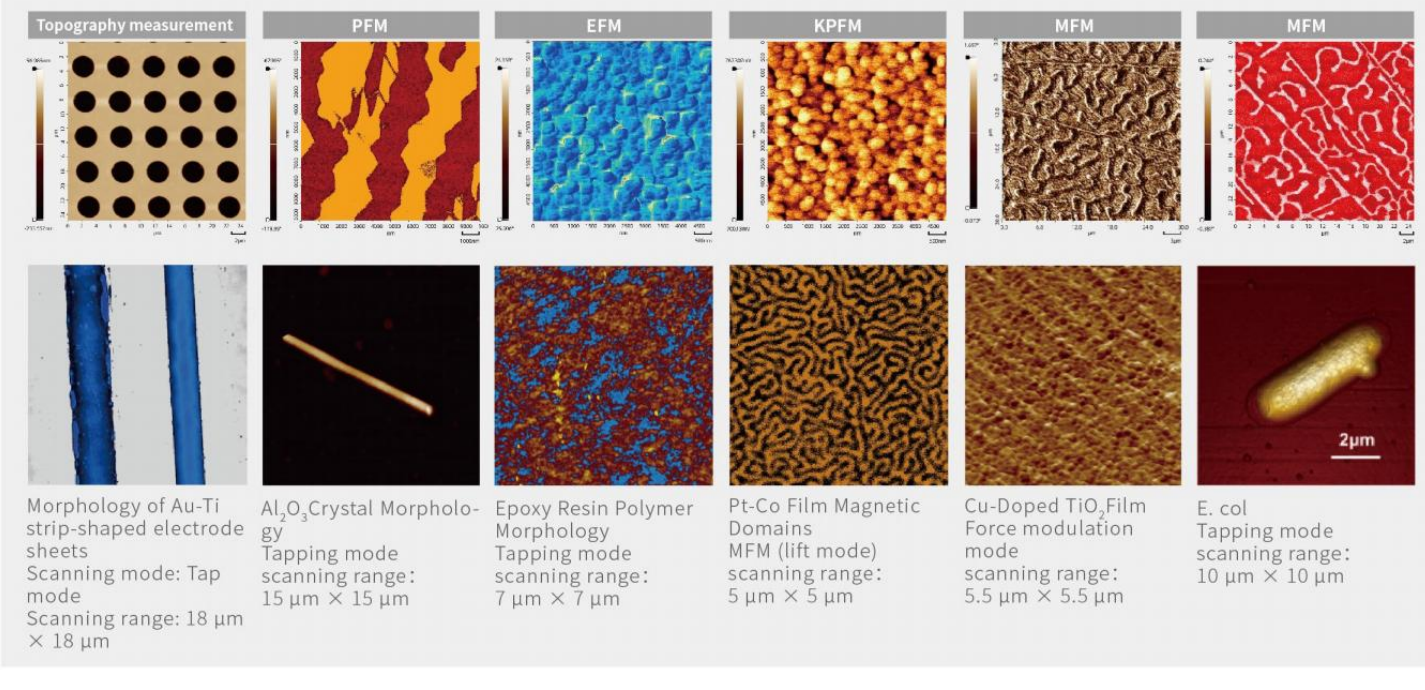
Product Introduction

The AtomEdge Pro multi-functional atomic force microscope can perform three-dimensional scanning imaging on materials, electronic devices, biological samples, etc. It features multiple working modes such as contact, tap, and non-contact, providing users with more flexible and precise operation options. In addition, it integrates multiple functional modes such as magnet-ic force microscopy, electrostatic force microscopy, scanning Kelvin microscopy, and piezoelectric force microscopy, featuring strong stability and good scalability. In addition, functional modules can be flexibly customized according to user needs, providing targeted solutions for specific research fields and achieving an efficient detection platform with multiple uses in one machine.

Equipment Performance

Sample Size	25 mm
Scanning Method	XYZ three-axis full sample scanning
Scanning Range	100 μm×100 μm×10 μm
Scanning Rate	0.1 - 30 Hz
Noise Level In The XY Direction	0.4 nm
Noise Level In The Z Direction	0.04 nm
Nonlinearity	0.15% in the XY direction and 1% in the Z direction
Image Sampling Point	The maximum resolution of the scanning probe image is 4096×4096
Working Mode	Contact mode,tap mode,phase imaging mode,lift mode,multi-directional scanning mode
Multifunctional Measurement	Electrostatic force microscope(EFM),scanning Kelvin microscope(KPFM),piezoelectric force micro- scope(PFM),magnetic force microscope(MFM),force curve

Application Cases



Morphology of Au-Ti strip-shaped electrode sheets
Scanning mode: Tap mode
Scanning range: 18 μm × 18 μm

Al_2O_3 Crystal Morphology
Tapping mode
scanning range:
15 μm × 15 μm

Epoxy Resin Polymer Morphology
Tapping mode
scanning range:
7 μm × 7 μm

Pt-Co Film Magnetic Domains
MFM (lift mode)
scanning range:
5 μm × 5 μm

Cu-Doped TiO_2 Film
Force modulation mode
scanning range:
5.5 μm × 5.5 μm

E. col
Tapping mode
scanning range:
10 μm × 10 μm

◆Tel:+886.909602109 ◆www.salukitec.com ◆sales@salukitec.com

2. Wafer-Level Atomic Force Microscope-Atom Max

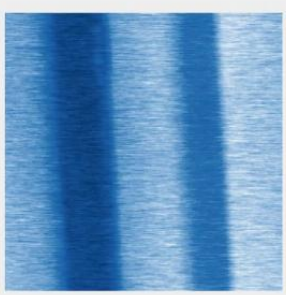
Product Introduction

Using micro-cantilever probe structures, this instrument enables 3D morphology characterization of conductive, semiconductive, and insulating solid materials, achieving wafer-level large-sample morphology characterization. Combined with an optical image, the electrically driven sample positioning stage allows for 1μm positioning accuracy within a 200×200mm area, with fully automated operations for laser alignment, probe approach, and scanning parameter adjust-ments.

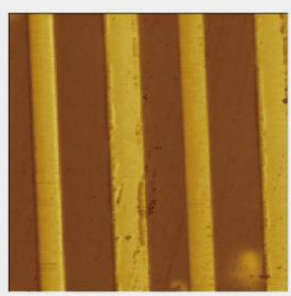
Equipment Performance

Sample Size	Compatible with 8-inch wafers and below
Scanning Range	Maximum 100μm×100 μm×10μm
Scanning Angle	0-360°
Resolution	Z-axis closed-loop resolution 0.15nm;X/Y closed-loop resolution 0.5nm
Scanning Probe XY Direction Image Resolution	Not less than 32×32～4000×4000
Operating Modes	Contact mode,tapping mode,phase imaging mode,lift mode,multi-directional scanning mode
Multi-Function Measurement	EFM,KFM,PFM,MFM

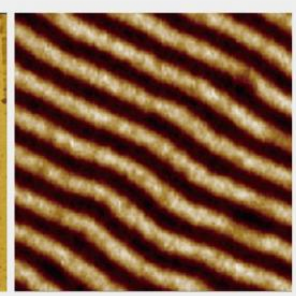
Application Cases



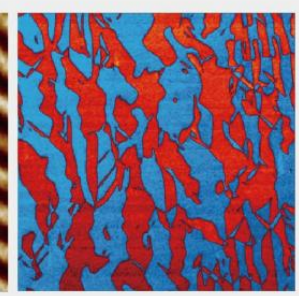
Au-Ti Strip Electrode Sheet Potential KPFM (lift mode) scanning range 18 μm × 18 μm



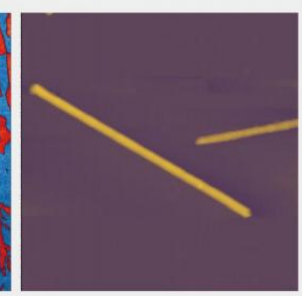
Au-Ti Narrow StripElectrode Sheet Electrostatic Force EFM (lift mode) scanning range 18 μm × 18 μm



Fe-Ni Film Magnetic Domains MFM (lift mode) scanning range 14 μm × 14 μm



$PbTiO_3$-Piezoelectric Response Amplitude Map PFM (contact mode) scanning range 20 μm × 20 μm



SiC Crystal Morphology Tapping mode scanning range 25 μm × 25 μm

◆Tel:+886.909602109 ◆www.salukitec.com ◆sales@salukitec.com

3. Partner Organizations

Research Institutes

Universities

Enterprises

◆Tel:+886.909602109 ◆www.salukitec.com ◆sales@salukitec.com