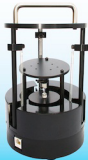




Nanovie™
Always at hand

Nanovie STM Lepto

Nanoscale Microscope for 3D Imaging, Spectroscopy & Lithography



3D nanoscale microscope under ambient conditions

Groove cycle ~750 nm & height ~25 nm

Particle diameter ~25 nm & height ~1 nm



1000 X 1000 nm
30 mV / 5 nA



600 X 600 nm
40 mV / 2 nA



400 X 400 nm
40 mV / 2 nA

In-liquid imaging

Scan images of wet samples placed in the liquid cell



1600 X 1600 nm
850 mV / 5.9 nA



560 X 560 nm
550 mV / 3.8 nA



1500 X 1500 nm
560 mV / 5.1 nA

Major Features

- 3D Nanoscale Imaging
- In-Liquid & In-Air Scan
- Anytime Anywhere
- I-V Curve ST Spectroscopy
- Nanoscale ST Lithography
- Real-time Tip Restoration

Tip restoration during scan

Imaging quality can be optimised in real time, without a full rescan



2500 X 2500 nm
300 mV / 3.5 nA

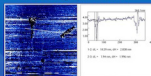
Raised triangle formed by atomic emission



Writing speed: 5 nm/s
Image: 800 X 800 nm

Lithography & in-situ rescan

Two concave grooves etched on graphite surface



Width: ~ 18 nm Depth: ~ 3 nm
Image: 500 X 500 nm

Nanovie STM Lepto
Model No: NSTL-002

Machine and Scan Module:

- Max. XY Scan Range: ~ 0.8 μm & ~ 2.5 μm Scanner Heads
- Max. Z Scan Length: ~ 1 μm
- Max. XY Resolution: < 1.0 nm
- Max. Z Resolution: < 0.1 nm
- Automatic Tip-to-Sample Approach
- Constant Current & Constant Height Scan Modes
- STS / I-V Curve Measurement
- In-liquid Scan
- Lithography
- Max. Image Size: 550 pt X 550 pt

Electronic Controller:

- 16-bit A/D & D/A Converters
- 10-V Scan Drive Voltage

Software

- N-terface Pro: Scan Controlling Interface
- N-mage: Image Processing & Data Analysis

Accessories:

- Magnetic Tip Holder * 1
- Magnetic Sample Holder * 1, Magnetic Liquid Cell * 1
- Extension Tube (for Large Area Scan) * 1
- Hand-carry Box * 1

Optional:

- Tungsten Tips for STM Scan: 24 Pcs / Box
- Insulated Tungsten Tips for STM In-liquid Scan: 24 Pcs / Box
- Nanovie Auto Tip Maker
- Samples for STM Scan: DVD Grooves, Blu-ray Disc Holes, Oxidized HOPG.

Computer Requirement: (Computer not included)

- Windows 2000, XP, Vista, 7, 8
- Minimum CPU: Intel Atom
- Two USB Ports

Nanovie STM Educa
Model No: NSTE-006

Machine and Scan Module:

- Max. XY Scan Range: ~ 1.2 μm & ~ 3.6 μm Scanner Heads
- Max. Z Scan Length: ~ 1 μm
- Max. XY Resolution: ~ 3.0 nm
- Max. Z Resolution: ~ 0.1 nm
- Constant Current Scan
- Manual Tip-to-Sample Approach
- Max. Image Size: 550 pt X 550 pt

Electronic Controller:

- 16-bit A/D & D/A Converters
- 10-V Scan Drive Voltage

Software

- N-terface: Scan Controlling Interface
- N-mage: Image Processing & Data Analysis

Accessories:

- Magnetic Tip Holder * 1
- Magnetic Sample Holder * 1
- Extension Tube (for Large Area Scan) * 1
- Camera for Tip Approach Monitoring * 1
- Plastic Case * 1

Optional:

- Tungsten Tips for STM Scan: 24 Pcs / Box
- Nanovie Auto Tip Maker
- Samples for STM Scan: DVD Grooves, Blu-ray Disc Holes, Oxidized HOPG.
- Liquid Cell & Insulated Tungsten Tips for In-Liquid Imaging (May not be optimised in terms of manual tip-to-sample approach.)

Computer Requirement: (Computer not included)

- Windows 2000, XP, Vista, 7, 8
- Minimum CPU: Intel Atom
- Two USB Ports