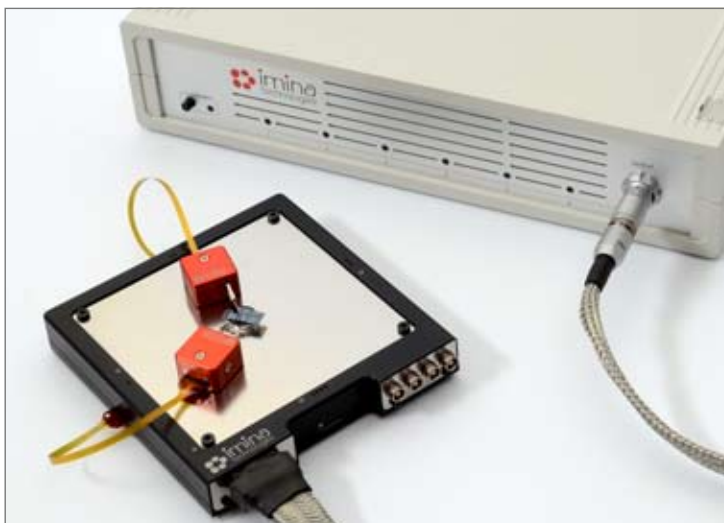




Nanomanipulation made easy.

Imina Technologies introduces the **miBot**: the world's smallest commercial micromanipulator. With four degrees of freedom, this mobile micro-robot provides **nanometer precision** displacements and travelling range of several centimeters. Thanks to its **intuitive** and **flexible** nature, the miBot is revolutionizing the handling and sensing of samples at micro and nano scale in a way which has never been achieved before. As it does not require mounting screws, the **set-up time is a matter of a few minutes**. And, since the motion directions of the miBot are aligned with its natural axes, it is very intuitive to control and allows you to **easily achieve complex manipulations**.



Installation

Whether you are working with optical or scanning electron microscopes (SEM or FIB), installing the miBot manipulators in your experimental setup has never been so easy. Standard **plug-n-play turnkey solutions** are provided and you can choose between different options and compatible micro-tools in order to tailor the system exactly to your needs.

Options

- 1 to 4 miBot manipulators
- Vacuum / SEM compatible components
- Electrical probing module
- Integration with non-standard microscopy equipment or complex experimental setups

Micro-Tools & Sensors

- Test probe tips ($\mu\text{m } \emptyset$)
- STM tips ($\text{nm } \emptyset$)
- AFM probes
- Force sensors
- Optical fibers

Speed-up Your Experiments in a Microscope

Key Features & Benefits

Ultra compact design

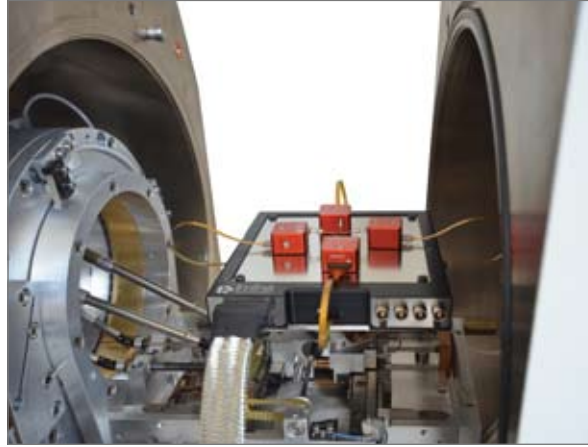
- High mechanical and thermal stability
- High stiffness for reduced sensitivity to vibrations
- Monolithic design for higher robustness

Extreme high resolutions of positioning on large travel range

- Piezoelectric actuators technology
- Virtually no motion limitation
- High operating velocity
- No drift ($< 1\text{ nm/min}$)
- No backlash

High modularity & versatility

- Compatibility with many types of microscopes (light, SEM, FIB)
- Compatibility with several micro-tools and sensors



Turnkey solutions

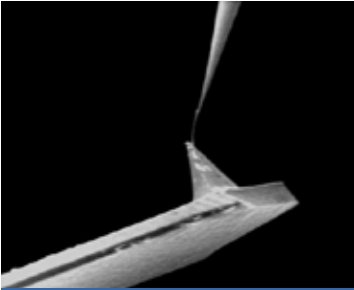
- Standard platforms with 1 to 4 miBot
- Custom integration with existing or new microscopy equipment

Unprecedented ease-of-use

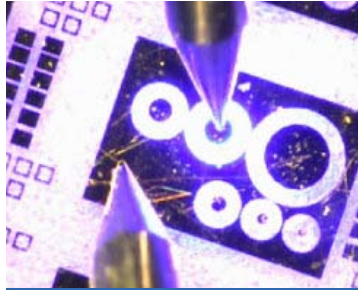
- Coarse positioning by hand (no screw)
- Fast setting-up and reconfiguration
- Easy transfer from one microscope to another
- Fast micro-tool exchange
- Intuitive control with control pad and software interface
- No coupling movements
- Extremely short training period



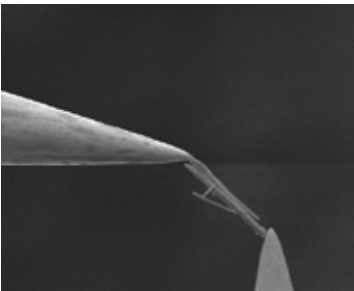
Applications



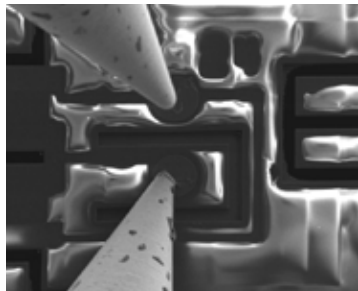
Nanomanipulation



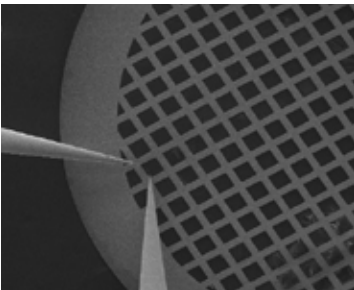
Electrical probing



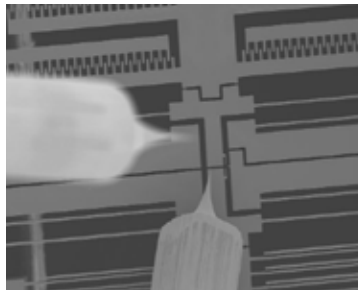
In situ material characterization



Micro / nanoelectronics



SEM / TEM sample preparation



MEMS testing

Imina Technologies

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