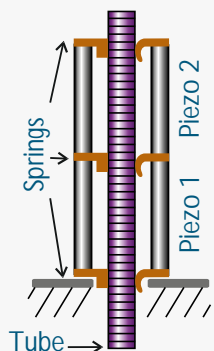


The new type of nanopositioner specially developed for SPM

Operation Principle:

Two are stronger than one!

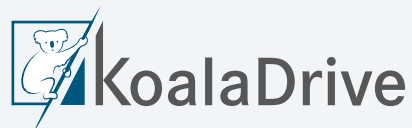


- If only one spring moves, the tube is fixed by the other two
- If two springs move simultaneously, the central tube moves together with the two springs

Features:

- Compact dimensions: down to \varnothing 2.5 mm, L 10 mm
- UHV, cryogenic, magnetic field compatible
- Smooth travel, no shaking
- Pulling/pushing force: up to 0.3 N
- Step width: 100 nm – 5 μ m, stroke: several mm

The key component of our STMs is the



Find more information including several movies showing its operation on our website:

www.mprobes.com



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52428 Jülich
Germany

Contact:

Prof. Dr. Bert Voigtländer
info@mprobes.com

mProbes
SPM with KoalaDrive

Ultra Compact STM

with  KoalaDrive

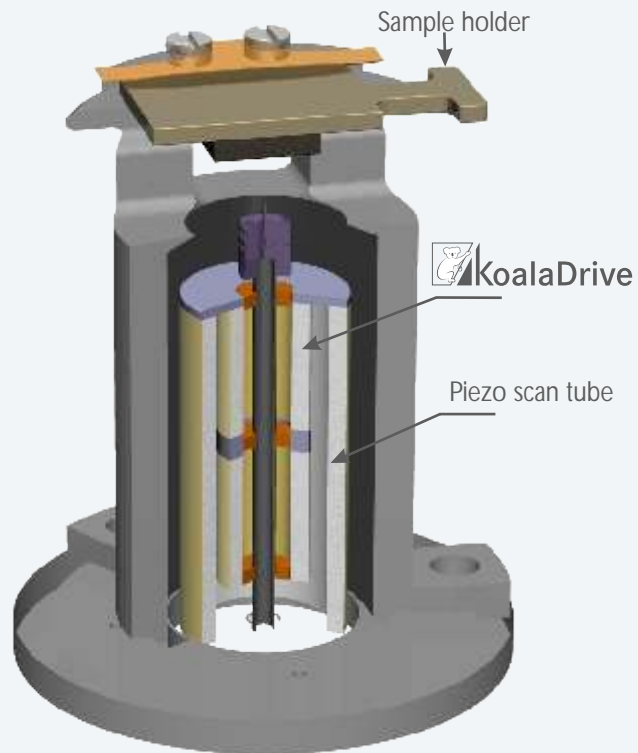


The  KoalaDrive is licensed by
Forschungszentrum Jülich GmbH

Easy STM upgrade of existing
surface analysis or MBE systems

Ultra compact KoalaDrive STM:

Integrating the KoalaDrive nanopositioner as coarse approach inside a tube scanner pushes the design of SPMs towards ultra compact instruments.



A smaller size leads directly to a smaller thermal drift and increases the resonance frequencies, leading to a insensitivity against external vibrations.

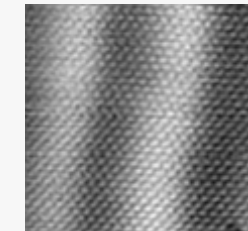
Features of the KoalaDrive STM:

- Ultra compact design
- High mechanical stability
- UHV, magnetic field and low temperature (4K) compatible
- Easy integration of STM to existing surface analysis, cryostat or MBE systems
- In situ tip and sample exchange
- Easy adaption to any standard sample holder
- Complete STM on a CF35 flange
- STM/AFM combination available

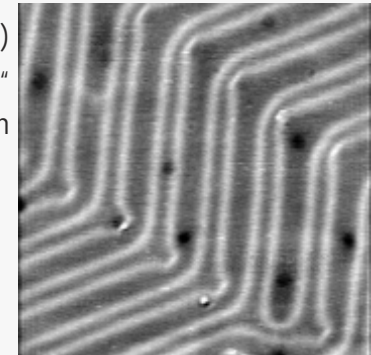


Performance of the KoalaDrive STM:

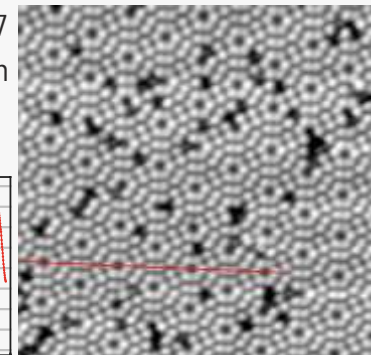
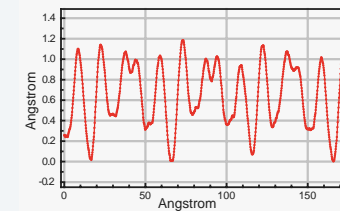
Au(111)
„herringbone“
reconstruction



Atomic resolution



Si(111)-7x7
reconstruction



We offer scanning probe microscopy solutions meeting your specific requirements. Our toolbox of nanopositioners enables an easy design of custom scanning probe microscopy instrument.