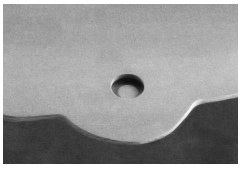
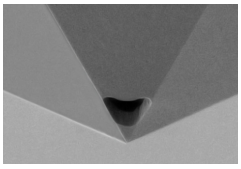
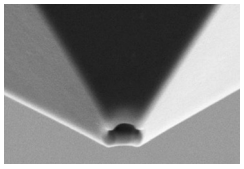
FluidFM® ADD-ON.

POWERFUL UPGRADE SOLUTION FOR AFM SYSTEMS.

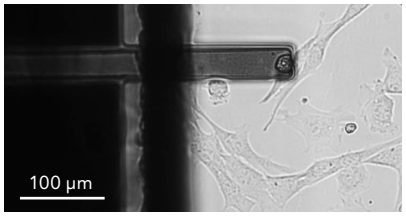
The FluidFM® ADD-ON greatly extends the application scope of classical atomic force microscopes beyond imaging and force spectroscopy.

Take advantage of more than 8 distinctive applications, now accessible thanks to Fluidic Force Microscopy (FluidFM). This technology is a unique combination of microfluidics and atomic force microscopy. Each type of patented hollow FluidFM probe unlocks a wealth of new applications for AFM users; from single cell adhesion via nano-injection, through to single cells and colloidal studies, to nano-printing, and beyond.

FluidFM micropipette	FluidFM nanosyringe	FluidFM nanopipette
 2, 4, 8 µm aperture	 600 nm aperture	 300 nm aperture
 Adhesion of single cells  Colloidal spectroscopy  Cell isolation	 Nano-injection into single cells  Nano-extraction from single cells	 Spotting  Adhesion of single bacteria  Nano-printing

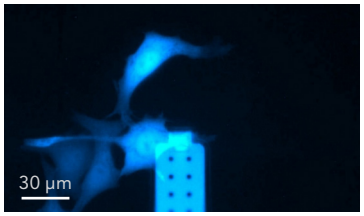
UNLEASH YOUR AFM. With the three distinct FluidFM probe families you get access to unique and high impact applications. More information on the diverse applications: www.cytosurge.com/r/fluidfm-addon

SELECTED APPLICATIONS.



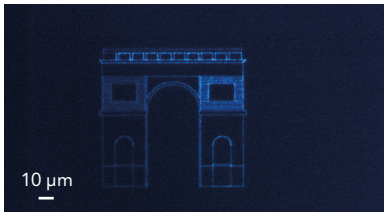
Adhesion of single cells

A HeLa cell is detached from adherent culture with a FluidFM micropipette. The adhesion force is quantified during the process. 10-fold higher throughput and force range can be achieved vs. standard SCFS. Works also for yeast, algae, bacteria and other microbes.



Nano-injection into single cells

Fluorescent tracer is injected into HeLa cells with a FluidFM nanosyringe. The injected volumes can be quantified through image analysis and are typically in the range of 50 fL to 300 fL.



Nano-printing

Nano-printing of 2D structures is possible with a FluidFM nanopipette in air or water and using a wide range of inks and viscosities.

The FluidFM ADD-ON is available for specific AFMs from:

BRUKER JPK BIOAFM nanosurf

70+ PUBLICATIONS

TAILORED TO YOUR AFM

100% AFM CAPABILITIES

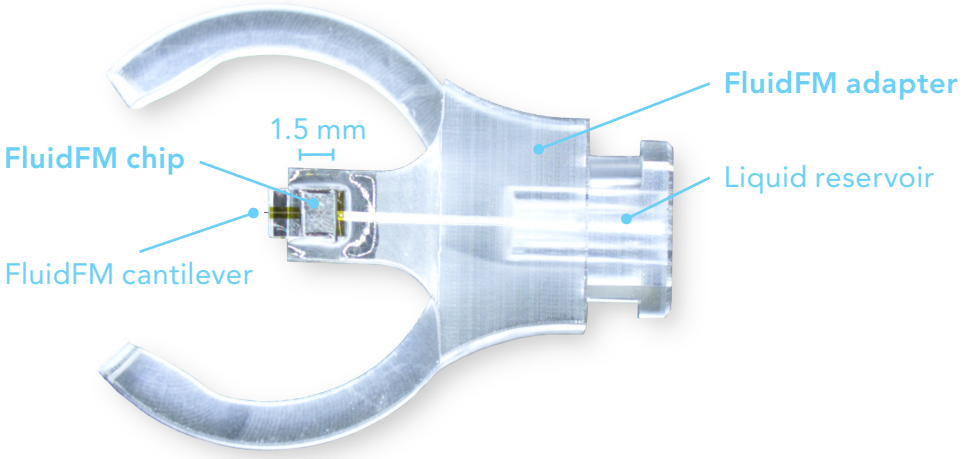
FluidFM® PROBE.

CORE TECHNOLOGY

At the core of all FluidFM systems are the patented hollow probes enabling all FluidFM applications.

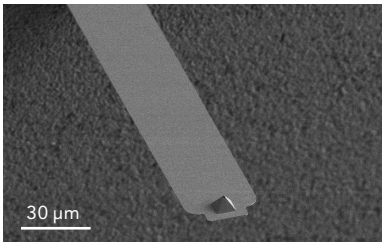
FluidFM probes are easy to use and are tailored to the specific geometrical and physical requirements of any compatible AFM system. A FluidFM probe consists of two parts:

- The pre-glued FluidFM chip which integrates the microfluidics as well as the hollow cantilever.
- The polymer adapter which is tailored to the specific AFM. It integrates a liquid reservoir and ensures a tight and reliable pneumatic connection up to the cantilever, as well as precise positioning for the AFM feedback.

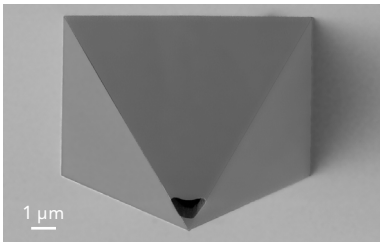


FluidFM probe. All FluidFM chips come pre-glued to an AFM-specific adapter.

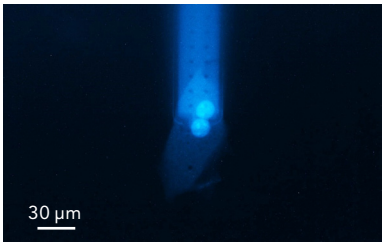
ZOOM IN: FluidFM NANOSYRINGE.



Cantilever.



Pyramidal tip of the nanosyringe with a 600 nm aperture.

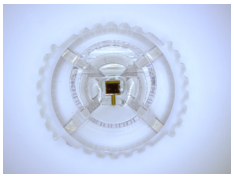


Intranuclear injection with the nanosyringe.

AFM-SPECIFIC FluidFM PROBES.

FluidFM probe with a specific adapter for JPK and Nanosurf AFMs.

JPK BIOAFM nanosurf



FluidFM probe with a specific adapter for Bruker AFMs.

BRUKER

CYTOSURGE®
CYTOSURGE AG, SÄGEREISTRASSE 25, 8152 GLATTBRUGG, CH
PHONE +41 43 544 87 00, WWW.CYTOSURGE.COM