



gitalsurf.com) (<https://www.facebook.com/FollowDigitalSurf/>) ([https://twitter.com/\\_DigitalSurf](https://twitter.com/_DigitalSurf)) (<https://www.linkedin.com/company/digital-surf>) (<https://www.youtube.com/channel/UC5cyEQHs-9lWZdn0p-cJcJA>)

Home (<https://www.digitalsurf.com/>) > Software & Solutions (<https://www.digitalsurf.com/software-solutions/>) > MountainsSPIP® for Scanning Probe Microscopy

**Based on industry-standard Mountains® technology and now also including all the best SPIP™ (Image Metrology) interactivity and analytical tools, MountainsSPIP® software contains the most advanced set of professional tools on the market for your scanning probe microscopy image analysis.**

Apply interactive particle analysis - Analyze force curves and force volume images - Perform correlative analysis by combining SPM images and data from other instruments - Analyze multi-channel files - Process data from ANY scanning probe microscope including atomic force microscopes (AFM) - Correct, normalize and denoise measured data - Ensure correct XY calibration - Correct tip effect - Characterize surface texture in accordance with ISO standards

WHAT'S INSIDE  
MOUNTAINSSPIP®

BENEFITS

PRODUCTS

OPTIONS

STORIES

TESTIMONIALS

30-  
DAY  
FREE  
TRIAL

## What's inside MountainsSPIP®

### Advanced particle analysis



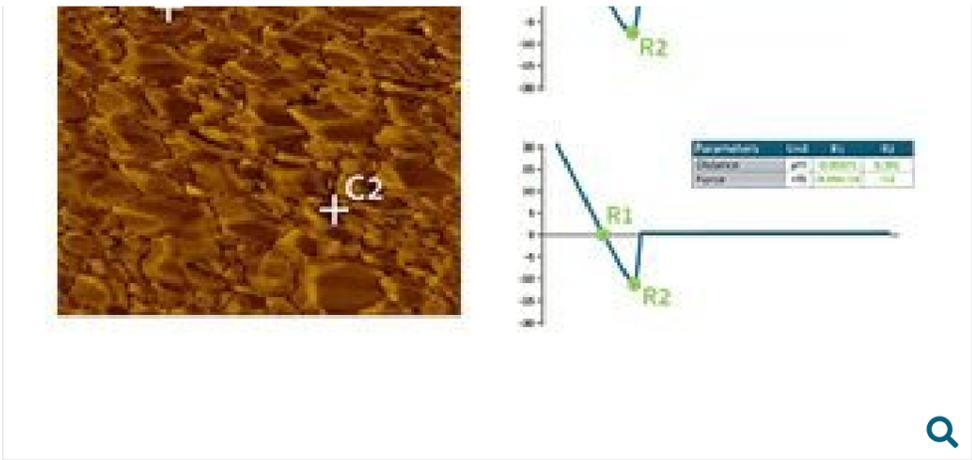
Parameters	Height	Area	Volume
Unit	nm	µm²	nm³
Grain #1	45.5	1.73	26019403
Grain #3	20.7	0.382	1709633
Grain #5	30.8	0.646	4581616
Grain #6	36.8	0.586	6256210
Grain #8	15.4	0.507	1247785
Grain #9	18.4	0.571	1777247



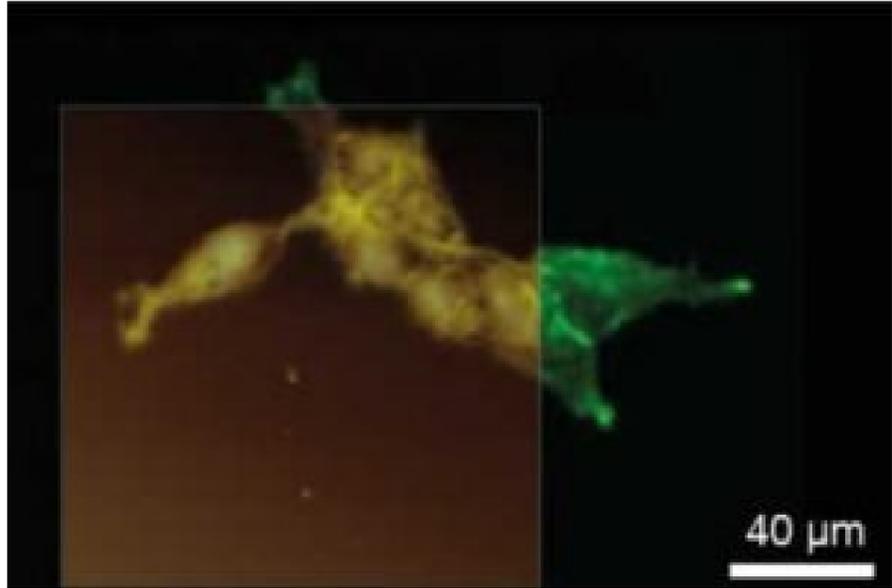
Newsletter

### Force spectroscopy

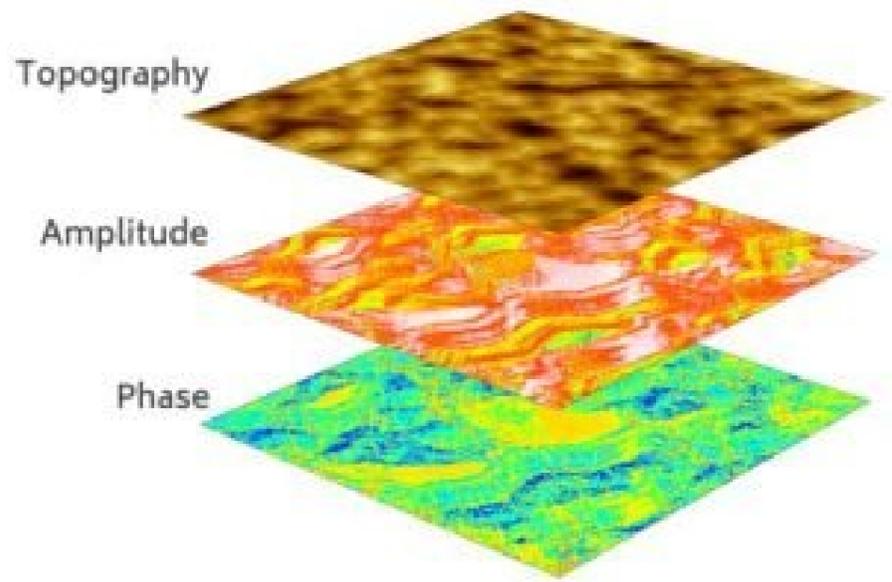




Correlative analysis



Multi-channel imaging & analysis



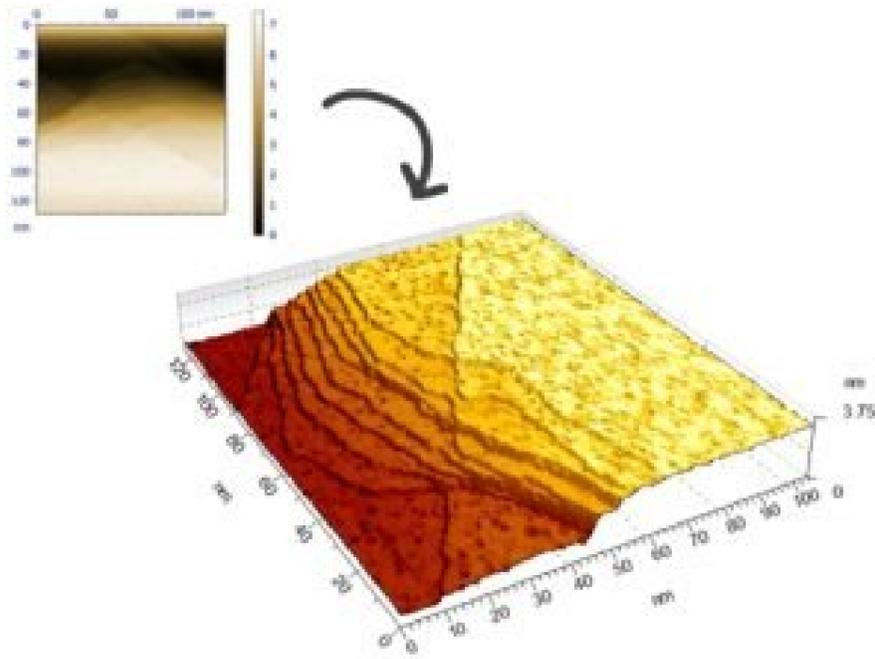
High compatibility

KPFM MFM  
**AFM** CSAFM  
SNOM STM

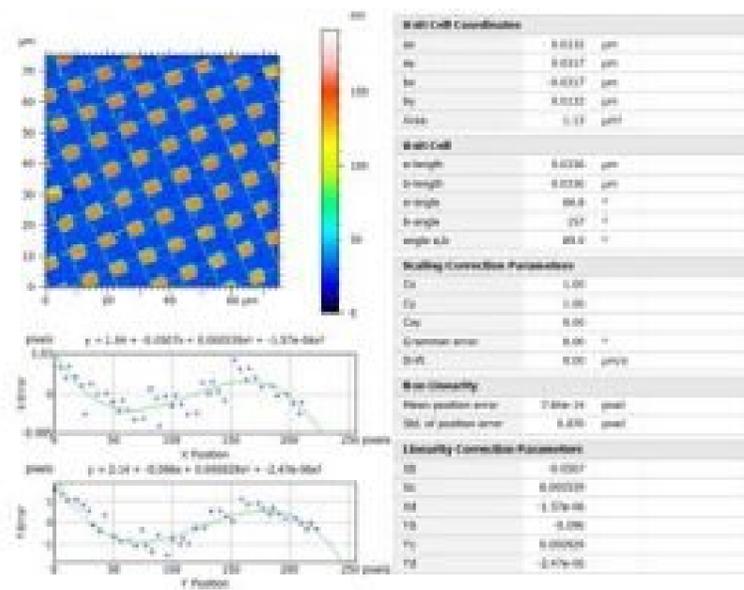
etc.



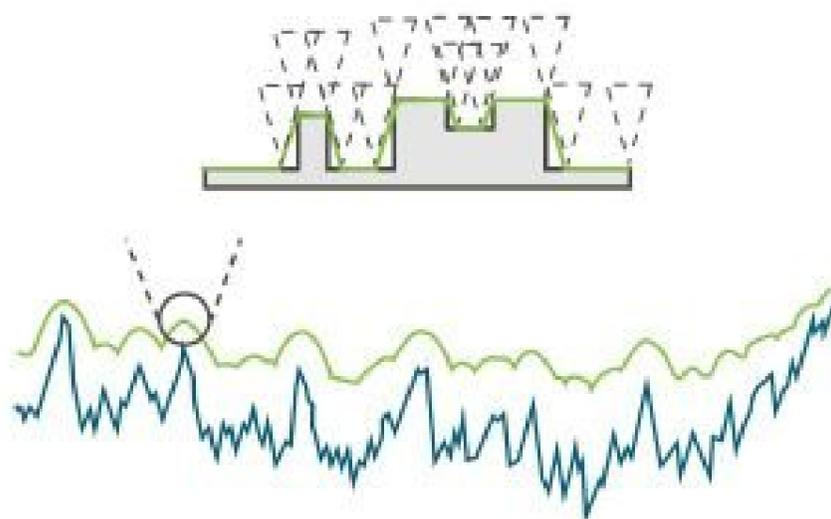
Data correction & normalization



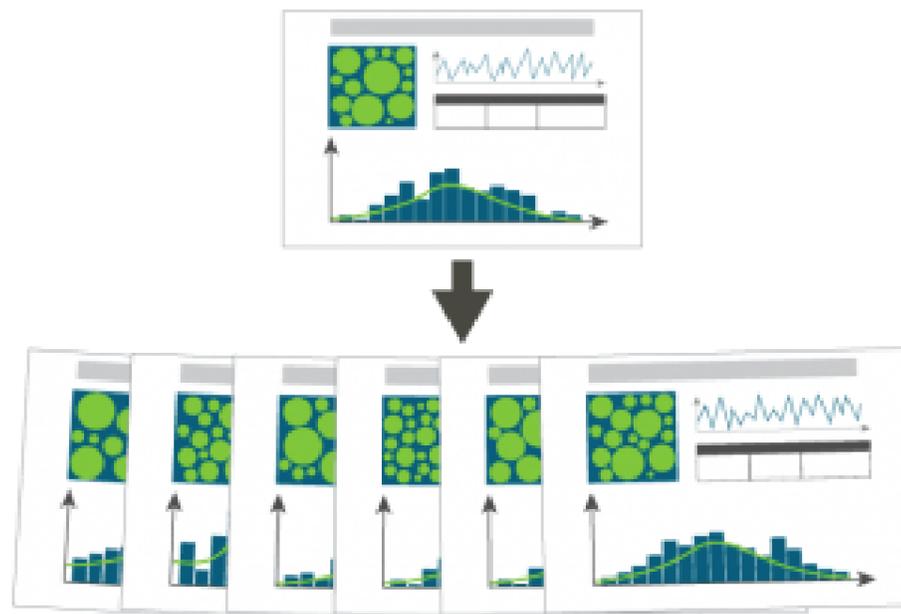
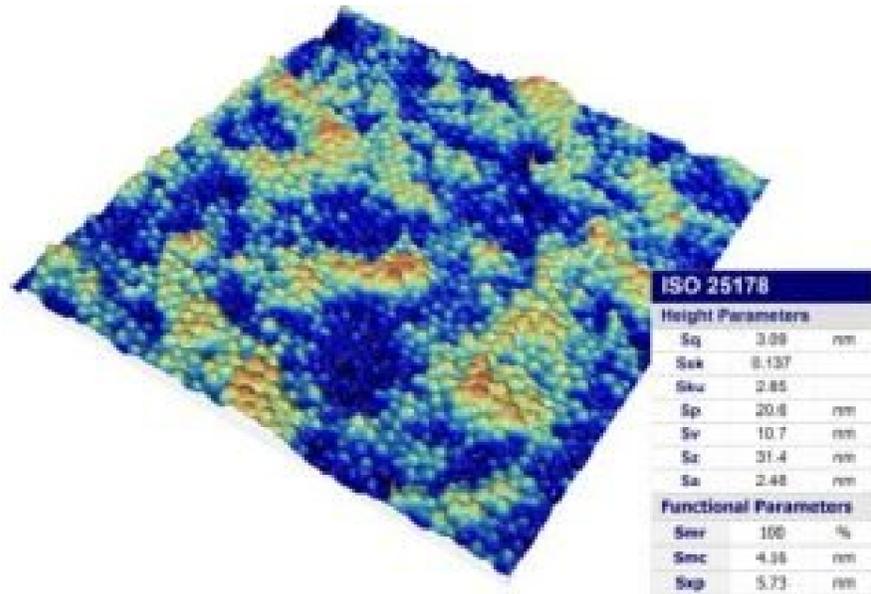
Lateral calibration



Tip deconvolution



Surface texture analysis



Select your product

	 MountainsSPIP® Premium	 MountainsSPIP® Expert	 MountainsSPIP® Starter
Instrument compatibility	Any scanning probe microscope (SPM) including atomic force microscopy (AFM), STM, SNOM etc.		
3D View with animation	✓	✓	✓
Advanced File Explorer	✓	✓	✓
Analysis of force curves	✓		

curves	✓		
Automation using Template Documents and document save/load features	✓	✓	✓
Basic tools for SPM image visualization and analysis	✓	✓	✓
Colocalization (correlative analysis)	✓		
Detection, analysis and classification of particles and pores	✓	✓	
Dimensional measurements (step heights, distances)	✓	✓	✓
Full reporting facilities including PDF and Word export	✓	✓	✓
Image stitching	✓		
Powerful statistical tools	✓		
Tip deconvolution	✓	✓	

(MAILTO:SALES@DIGITALSURF.COM)

## Recommended optional modules

The following range of optional modules for advanced and specialized applications is available for MountainsSPIP® range.

### Profiler Extension Module

Profiler data management & analysis including distances and step heights measurement, basic ISO standard filters & filtering techniques

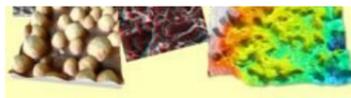


(<https://www.digitalsurf.com/optional-modules/profiler-extension/>)

### SEM Topography Module

3D reconstruction from 2 or 4 SEM images, instant 3D enhancement of single SEM images & semi-automatic image colorization

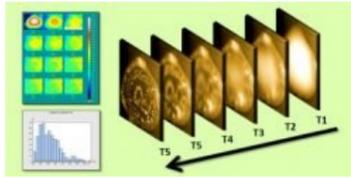




(<https://www.digitalsurf.com/optional-modules/sem-extension/>)

**4D Series Module**

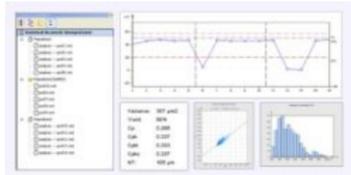
Analyze surface evolution with respect to time, temperature, magnetic field or another dimension



(<https://www.digitalsurf.com/optional-modules/4d-series-analysis/>)

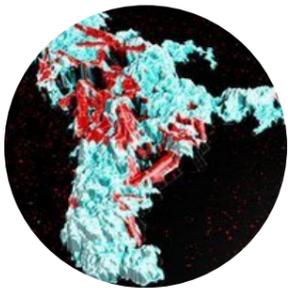
**Statistics Module**

Automate statistical analysis of multiple data population types and study process capability



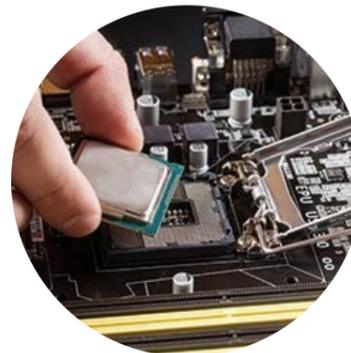
(<https://www.digitalsurf.com/optional-modules/statistics/>)

**Stories**



**Correlating AFM, SEM & EDX data for nanoparticle analysis**

For this application, a research team at the LNE Nanotech Institute combined measurements from several instrument techniques including Atomic Force Microscopy (AFM) and Scanning Electron Microscope (SEM) equipped with a new-generation energy dispersive X-ray detector (EDX). They used MountainsLab® software to correlate the collected data and extract the relevant information.



**Exploring hyperspectral maps of 2D materials**

Tailoring 2D semiconductor heterostructures with specific bandgaps is a leveraging new quantum materials for electronics and optoelectronics, a topic for researchers currently working in nanotech. Craig Wall, application engineer at Montana Instruments, recently investigated the subject using MountainsLab® software to analyze results from Raman spectroscopy and photoluminescence.

(<https://www.digitalsurf.com/wordpress/stories>)



Founder of SurfaceChar LLC

I have really enjoyed working with MountainSPIP and taking advantage of its powerful features. While it does take some time to learn, this software

<https://www.digitalsurf.com/software-solutions/scanning-probe-microscopy/>



AFM expert, SPM Labs LLC.

I myself have enjoyed working with Mountains® for a number of years. In my opinion, it is essential that AFM users work with spe-

package builds on the success of SPIP Image Metrology to deliver everything we are used to and more. Some of my favorite new capabilities including the ability to save a workflow, improved image visualization and versatile and easy-to-use particle sizing. Well worth the time investment to master this powerful and useful software!

packages such as those based on Digital Surf's Mount

### 30-day free trial



### Try Mountains® software for free

(HTTPS://WWW.DIGITALSURF.COM/FREE-TRIAL/)

#### Contact

**Digital Surf Headquarters**  
16 rue Lavoisier, 25000 Besançon,  
France  
**Phone: +33 38150 4800**  
**E-mail: [contact@digitalsurf.com](mailto:contact@digitalsurf.com)**  
(mailto:contact@digitalsurf.com)

#### Resources

Site map (<https://www.digitalsurf.com/site-map/>)  
FAQ (<https://www.digitalsurf.com/about/faq/>)  
Metrology guide (<https://guide.digitalsurf.com/en/guide.html>)  
Surface Newsletter (<https://www.digitalsurf.com/learning/surface-newsletter/>)  
Contact (<https://www.digitalsurf.com/about/contact/>)  
Privacy policy (<https://www.digitalsurf.com/privacy-policy/>)

©1996-2021 Digital Surf. All rights reserved.

<https://www.facebook.com/FollowDigitalSurf/> <https://twitter.com/DigitalSurf> <https://www.linkedin.com/company/digital-surf/> <https://www.youtube.com/channel/UC5cyEQHs-9IWZdn0p-cJcJA>