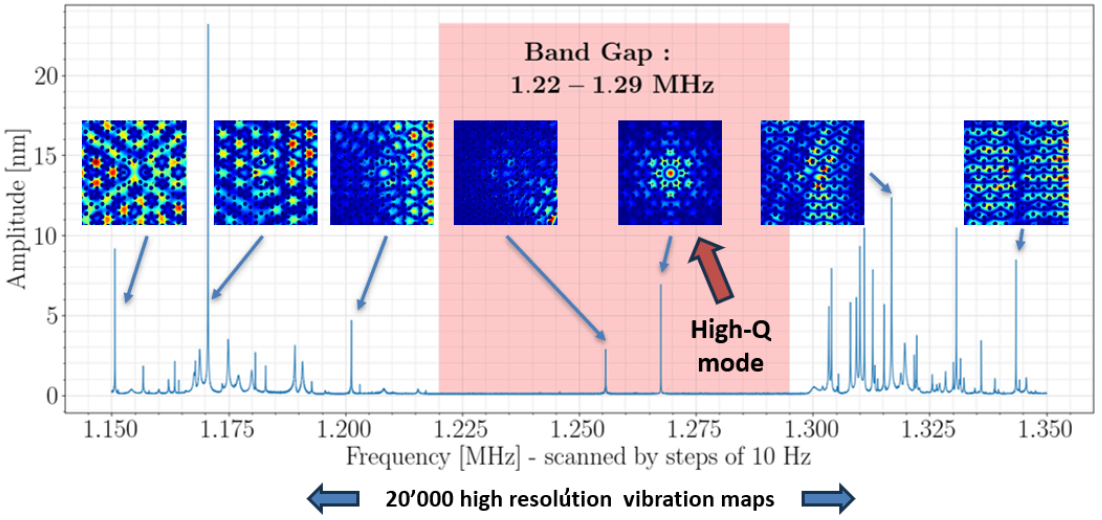
DHM®: High-Q MEMS analysis

Our **NEW** High-Q stroboscopic module
enables MEMS frequency response to be analyzed with a resolution
of 1 ppb (part per billion) ,
and characterize resonances with
Q-factors of up to 10^9

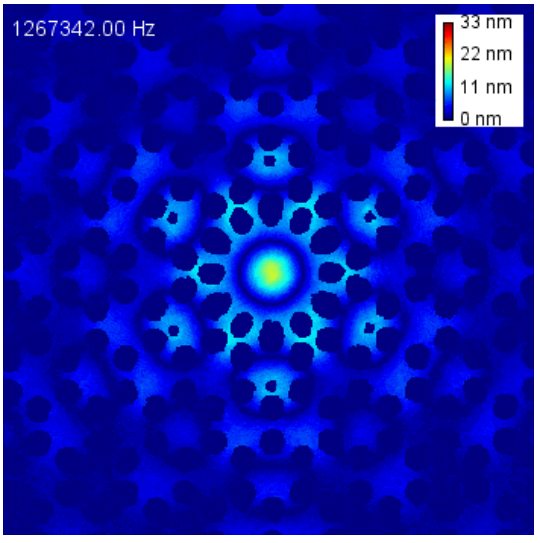
Phononic crystal structure frequency response

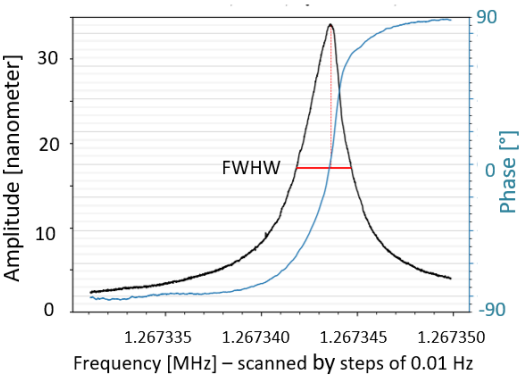


20'000 high resolution vibration maps

Sample courtesy: Prof. Dr. Albert Schliesser and Dr. Eric Langman, Copenhagen University Denmark, and Qfactory ApS

High-Q mode scanned by steps of 0.01 Hz ...



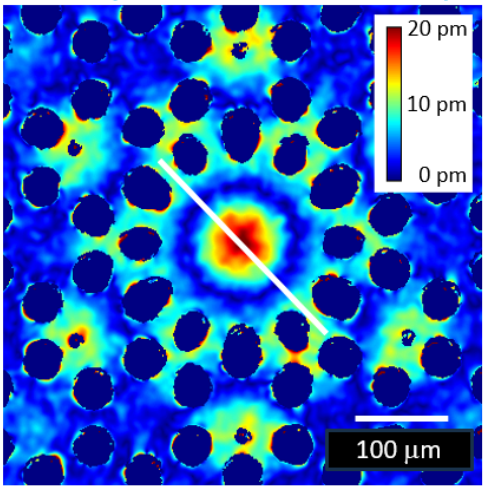


Resonance:
- Frequency: 1'267'343.61 Hz
- FWHW: 2.85 Hz
- **Q-factor: 444'681**

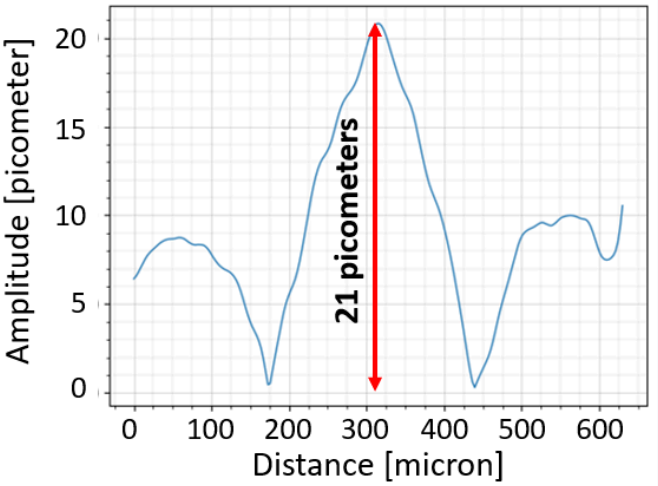
Excitation: piezo, sinus,2V

... with PICOMETERS out-of-plane resolution

Amplitude Vibration Map



Profile cut



Excitation voltage reduced from 2V to 0.01 V

Learn more about this application

Specifications

- **4D optical profilometry**
  - from static to 25 MHz
  - frequency step resolution: 1 ppb
- **Resolution (frequency independent):**
  - Topography: interferometric
  - In-plane vibration: 1 nm
  - Out-of-plane vibration resolution: 1 pm
  - Digital: 1024x1024 pixels
- **Environments**
  - in liquids
    - water, physiological solution, chemical etchants, ...
  - in enclosures through optical windows
    - microfluidic devices, vacuum, gaz, and environmental chambers
  - from cryogenic to high temperatures
- **Compatibility of the new stroboscopic module**
  - Any new DHM
  - Most of current installed DHMs

More specifications

OneTreePlanted

Join our DHM users' forest of more than 9'000 trees!

For any DHM® purchase based on a remote live-demo, Lyncée commits to plant trees through the non-profit organization OneTreePlanted

Send us a sample and book a remote demo

ONETREEPLANTED

SWISS QUALITY

High-precision scientific equipment.
Proudly manufactured by us in Switzerland.

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