

KAWAKATSU LAB.

[Bringing the Atomic World into Full Colour]

Centre for Interdisciplinary Research on Micro-Nano Methods

Scanning Probe Microscopy and Nano-Machines

PRECISION ENGINEERING

<http://www.inventio.iis.u-tokyo.ac.jp>

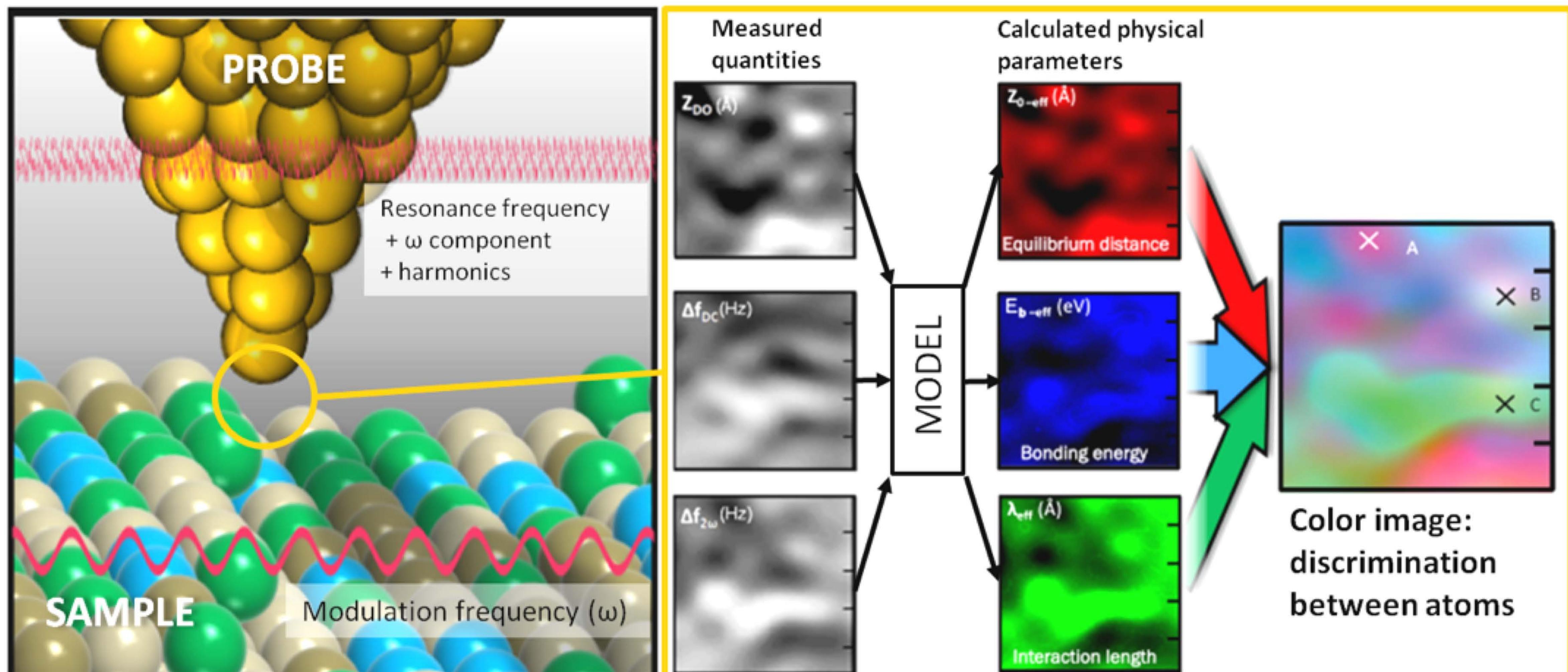


Fig.1. Colour Atomic Force Microscopy. Modulation techniques were employed to measure the potential landscape on-the-fly. The potential parameters were assigned to RGB to generate a colour image.



Fig.2. UHVTEMAFM.

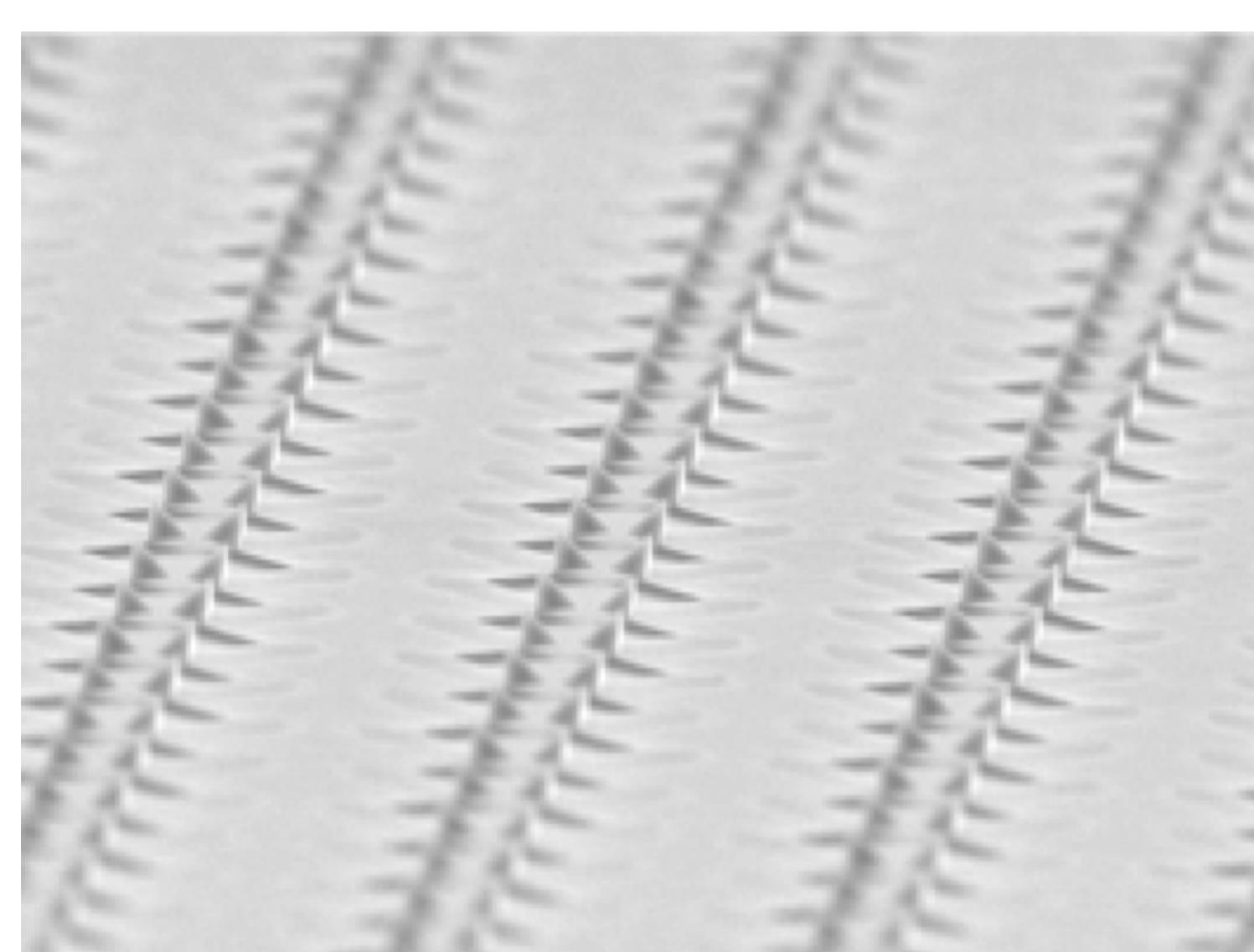


Fig.3. Millions of cantilevers for parallel sensing and multiasperity contact.

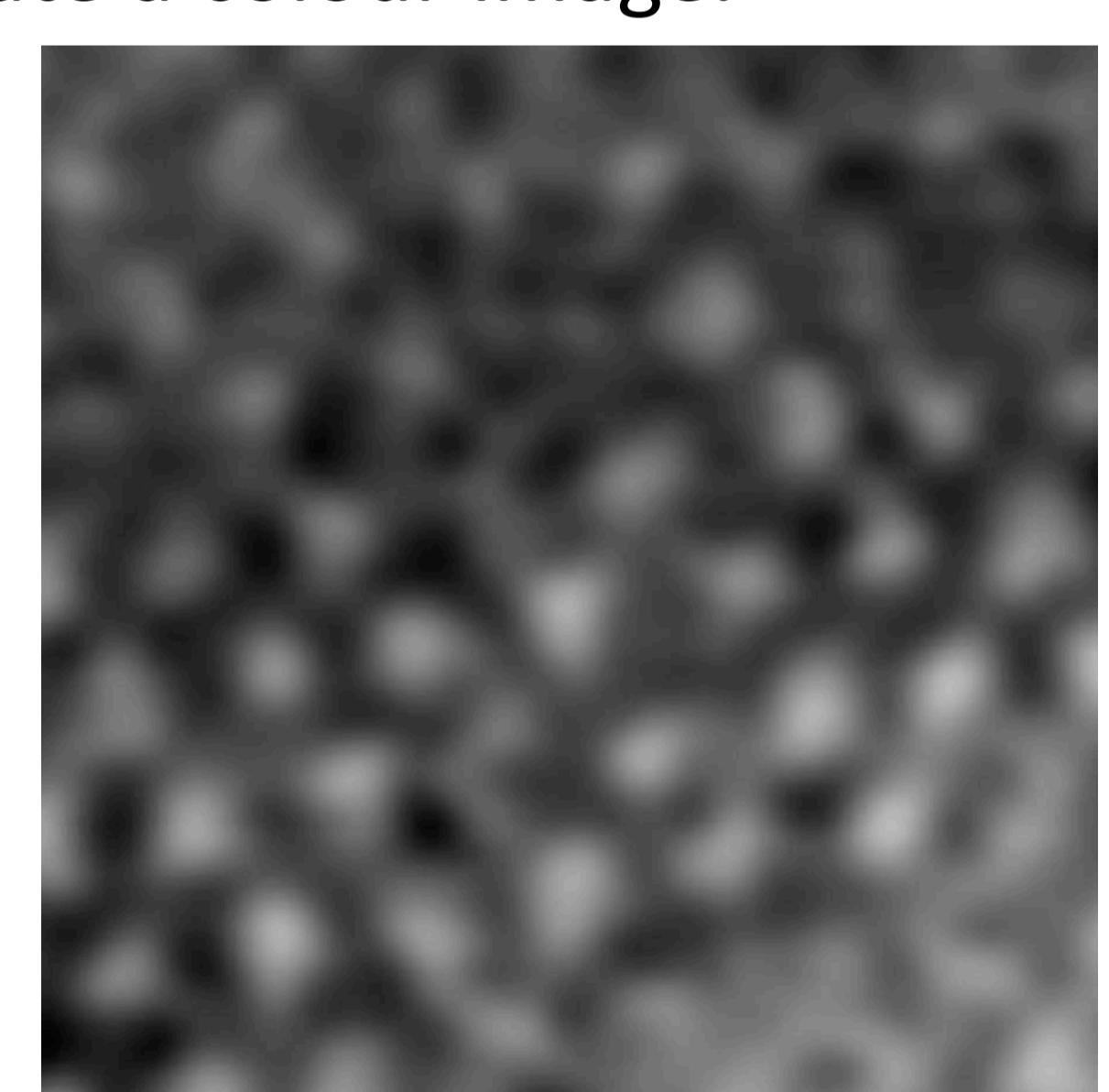


Fig. 4. Water on mica. Liquid AFM.

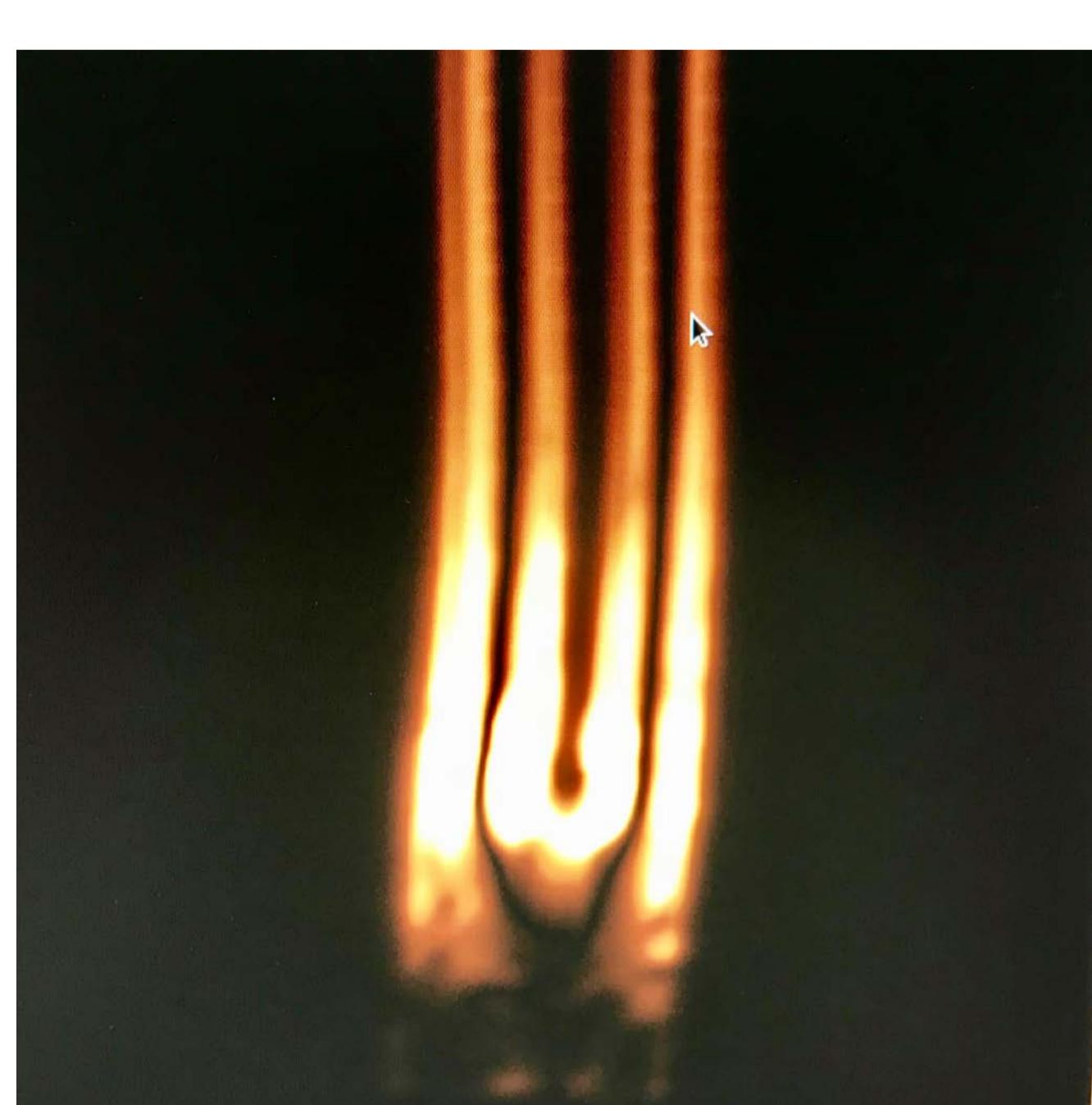


Fig.5. Mapping optical excitation efficiency of a tuning fork for AFM.

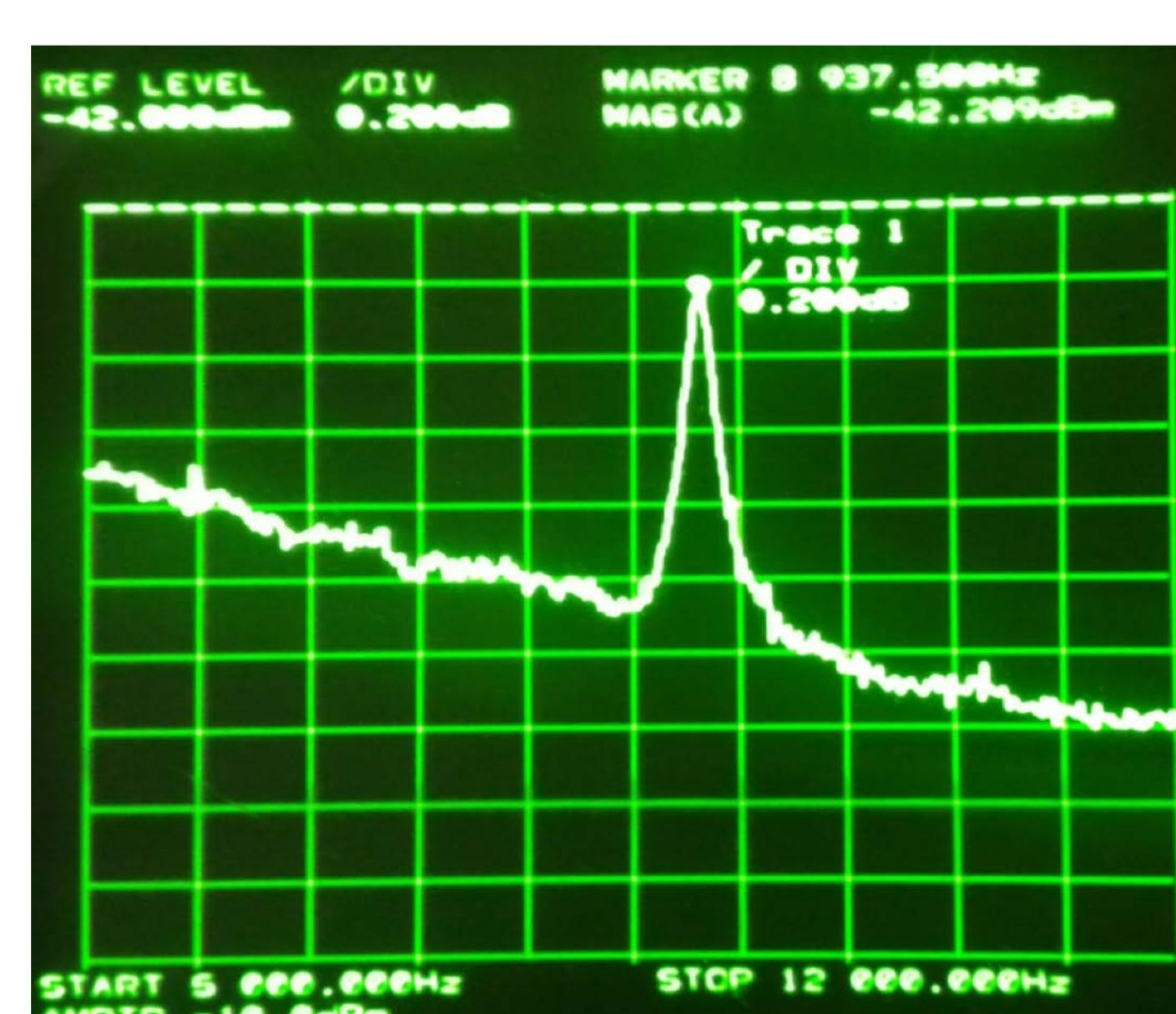


Fig. 6 Exciting vibration of an AFM cantilever with an optical lever.

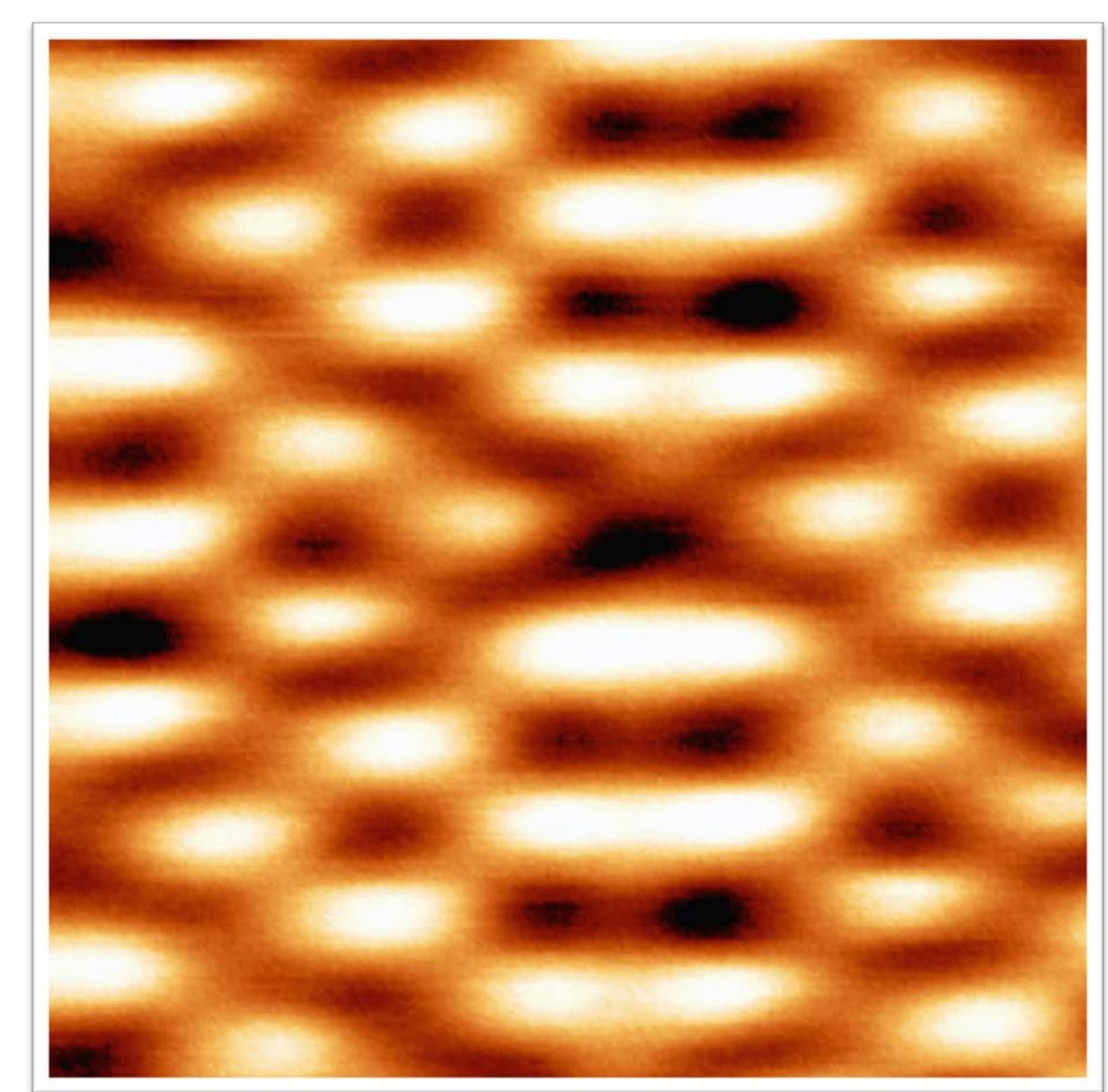


Fig. 7 Lateral force gradient of Si(111) 7x7 surface.