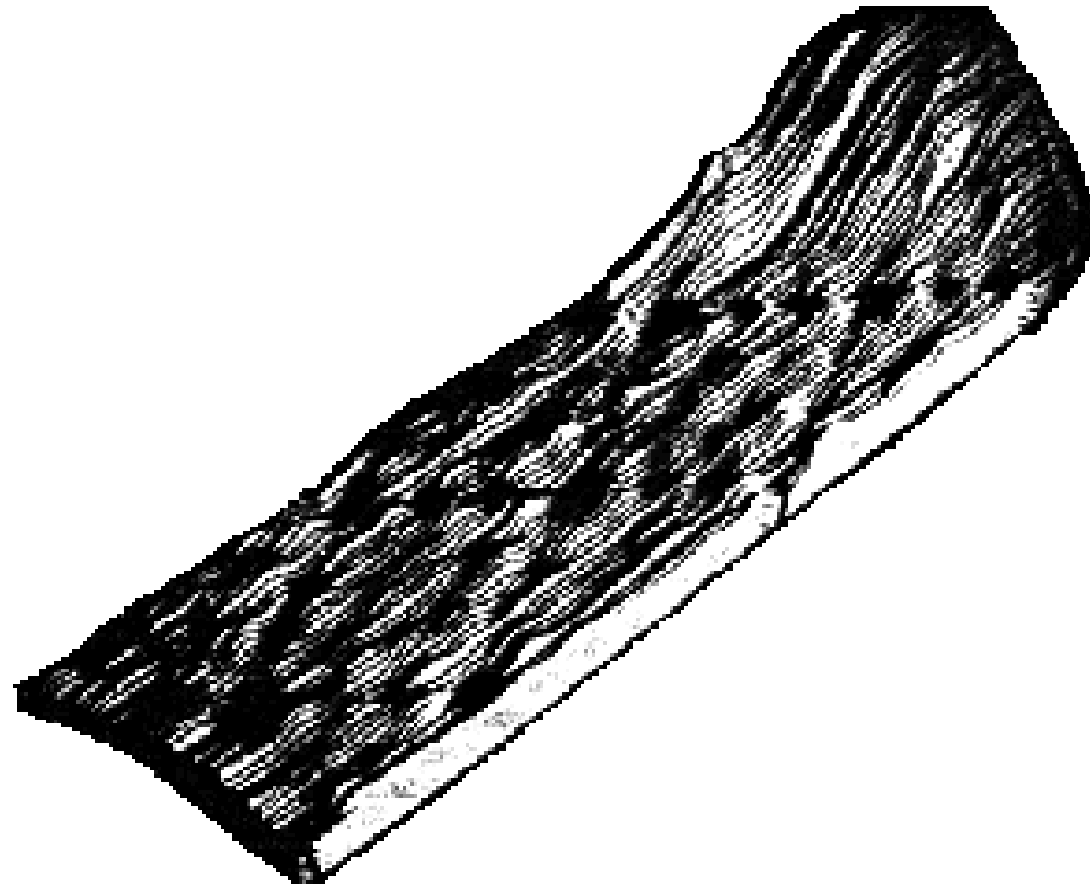
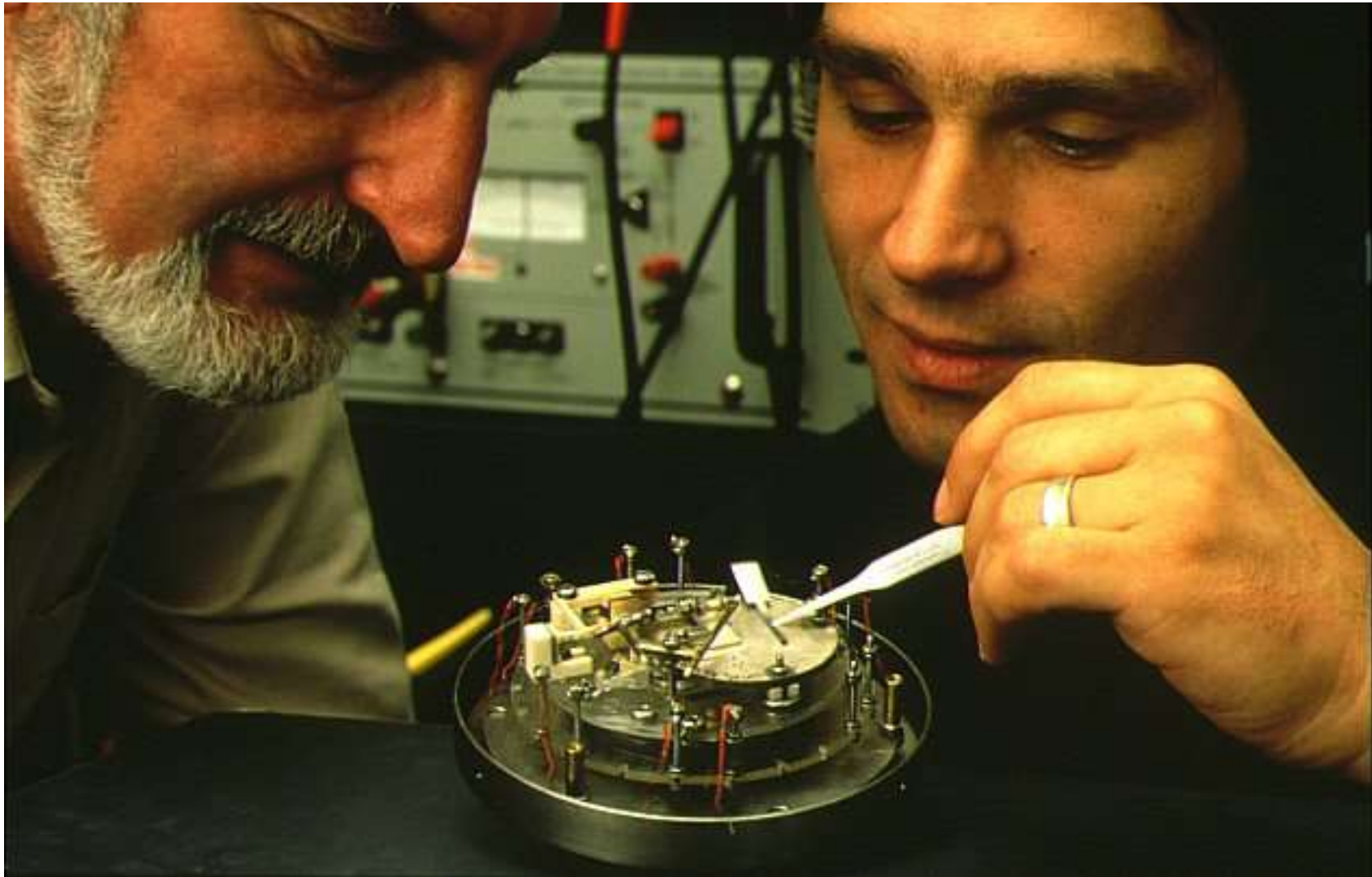


Einführung in die Rastersondenmikroskopie

Andreas Bogk
Chaos Computer Club



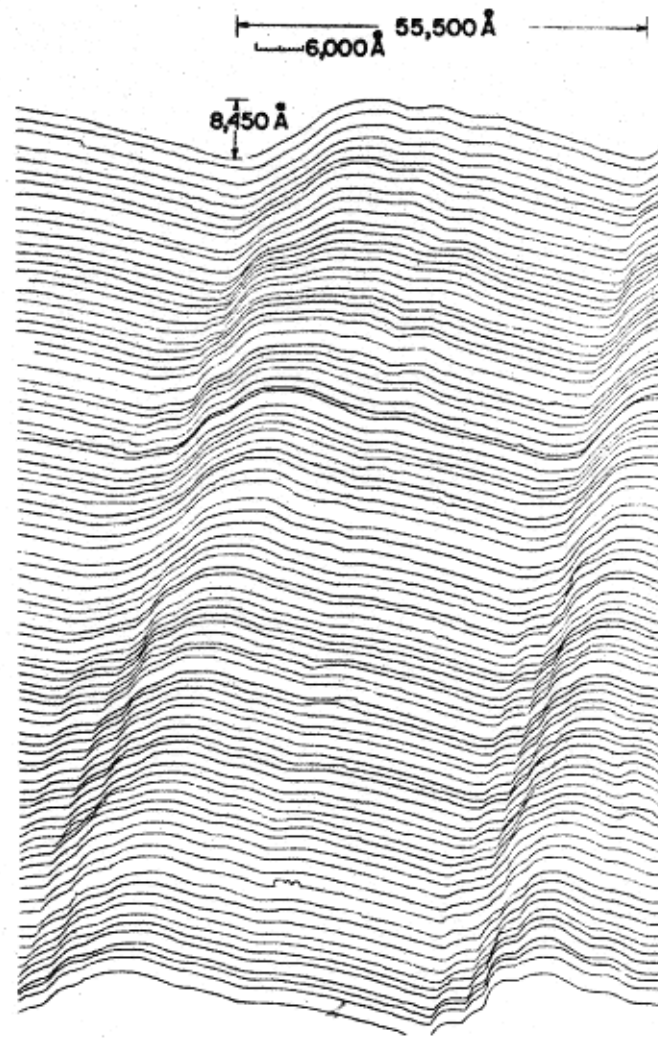
Durchbruch: 7x7-Atomgitter-Anordnung von Silizium



Heinrich Rohrer, Gerd Binnig



Rastertunnelmikroskop Binnig/Rohrer (Nachbau)

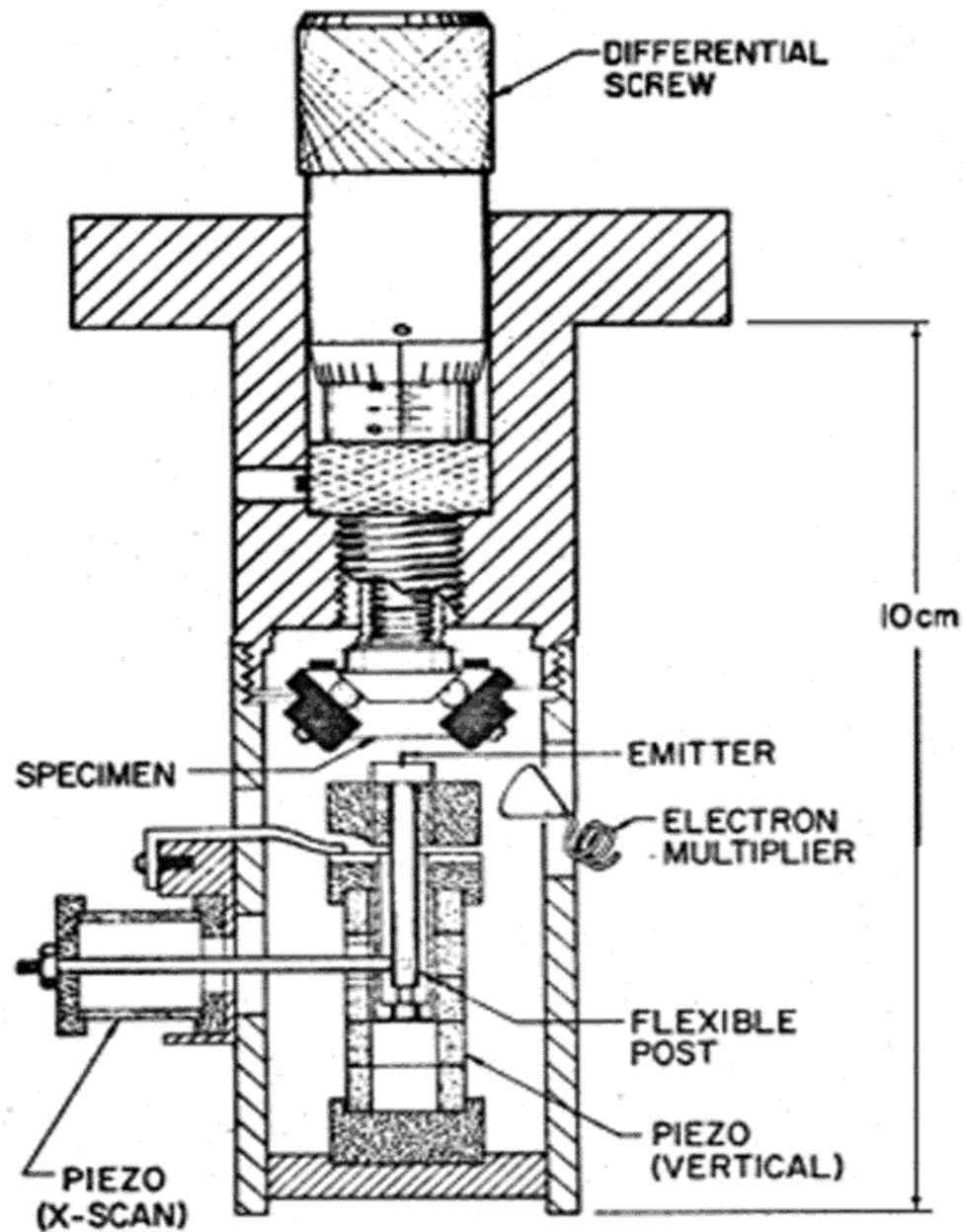


(a)

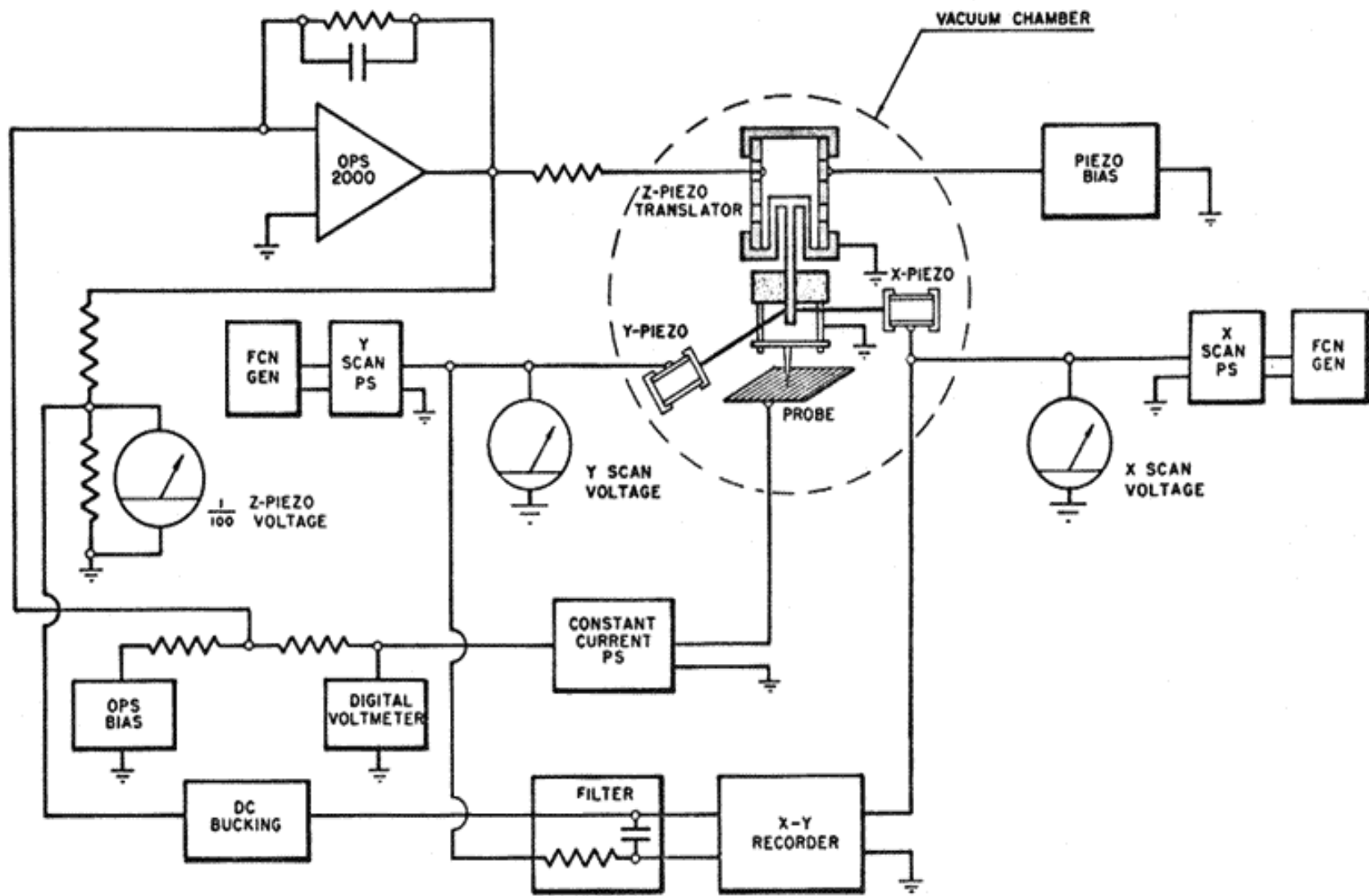
Topographische Struktur, aufgenommen mit dem Topografiner



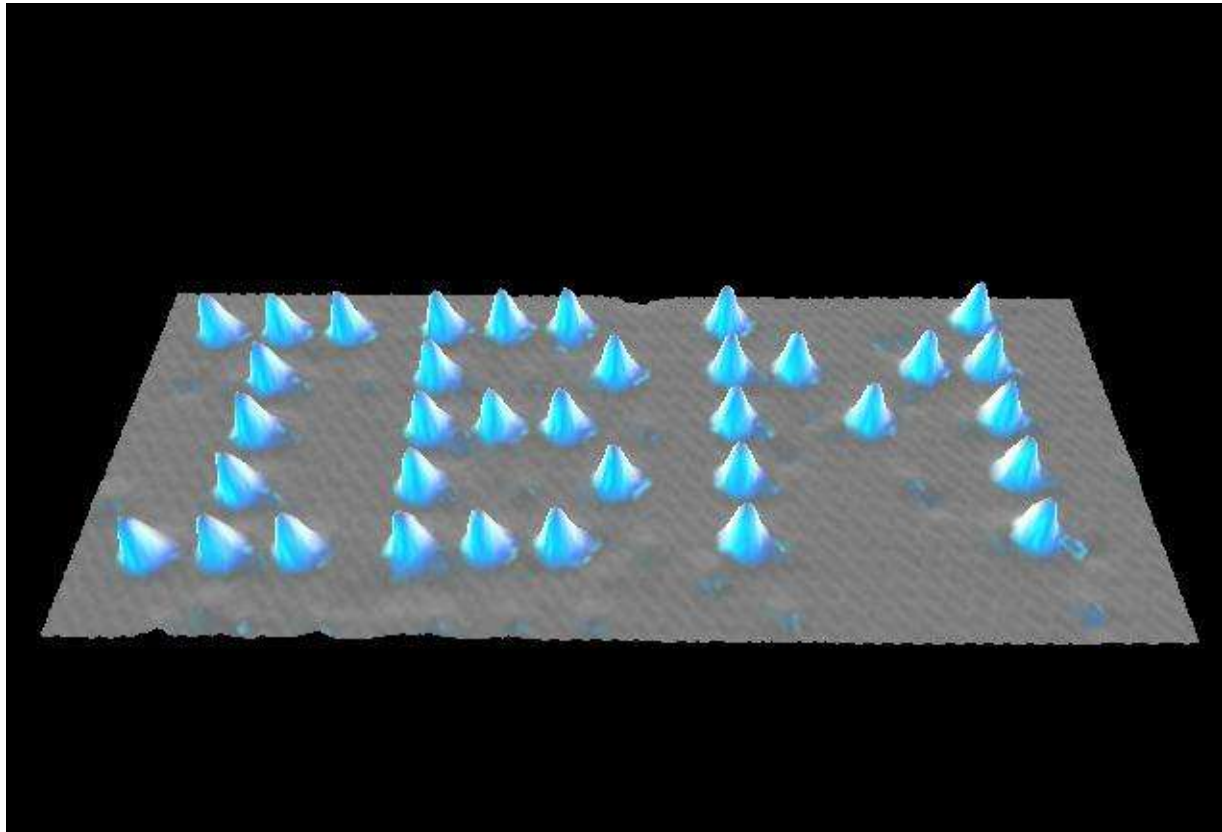
Russell Young

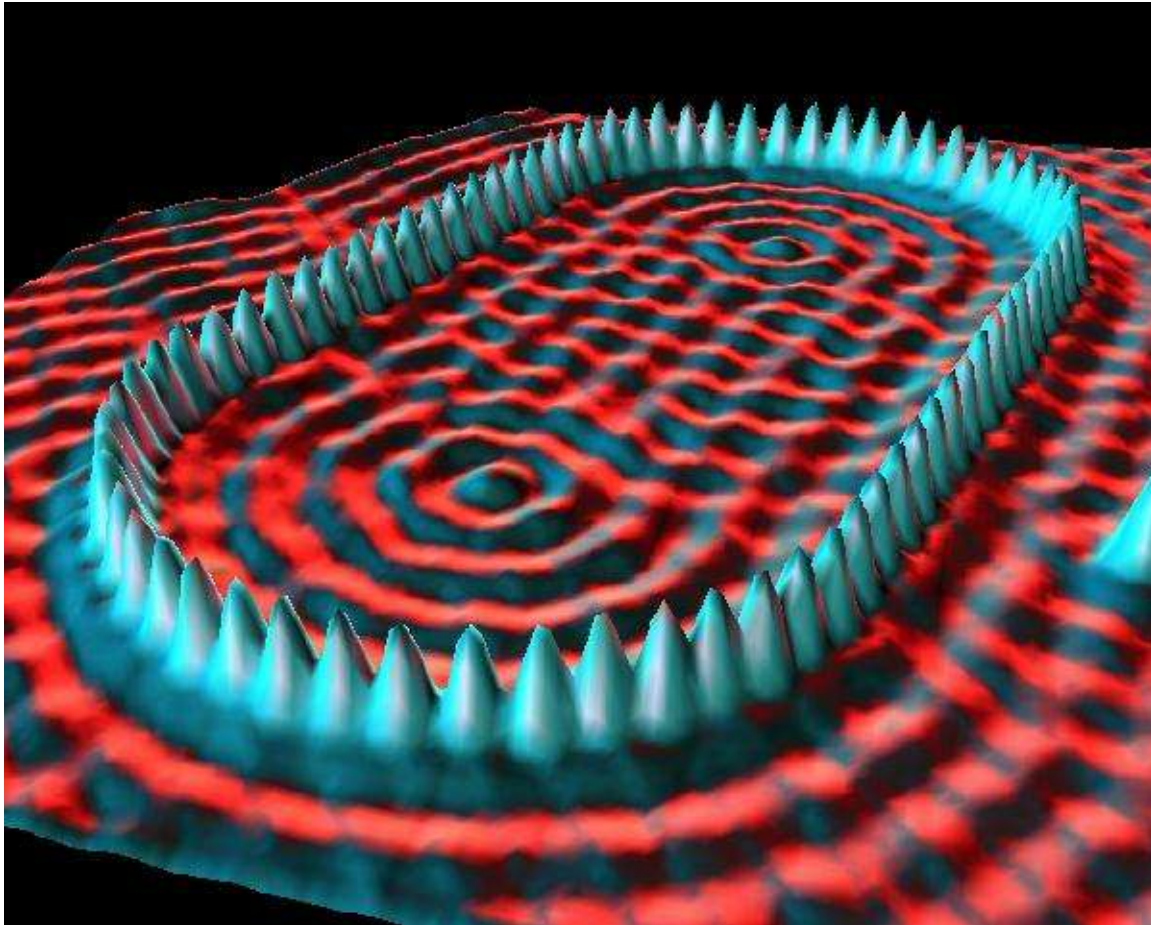


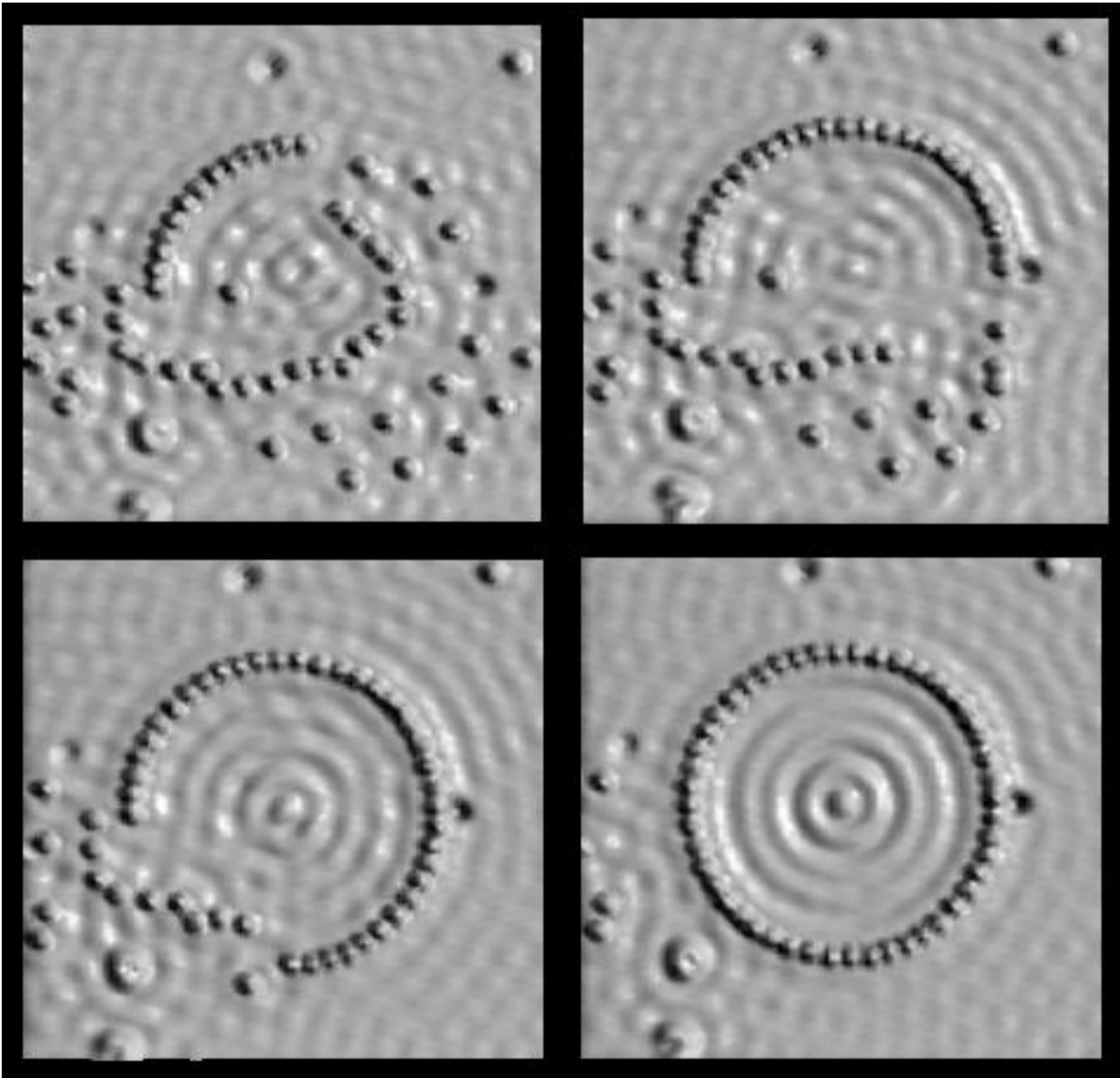
Topografiner Schemazeichnung



Topografiner Schaltplan







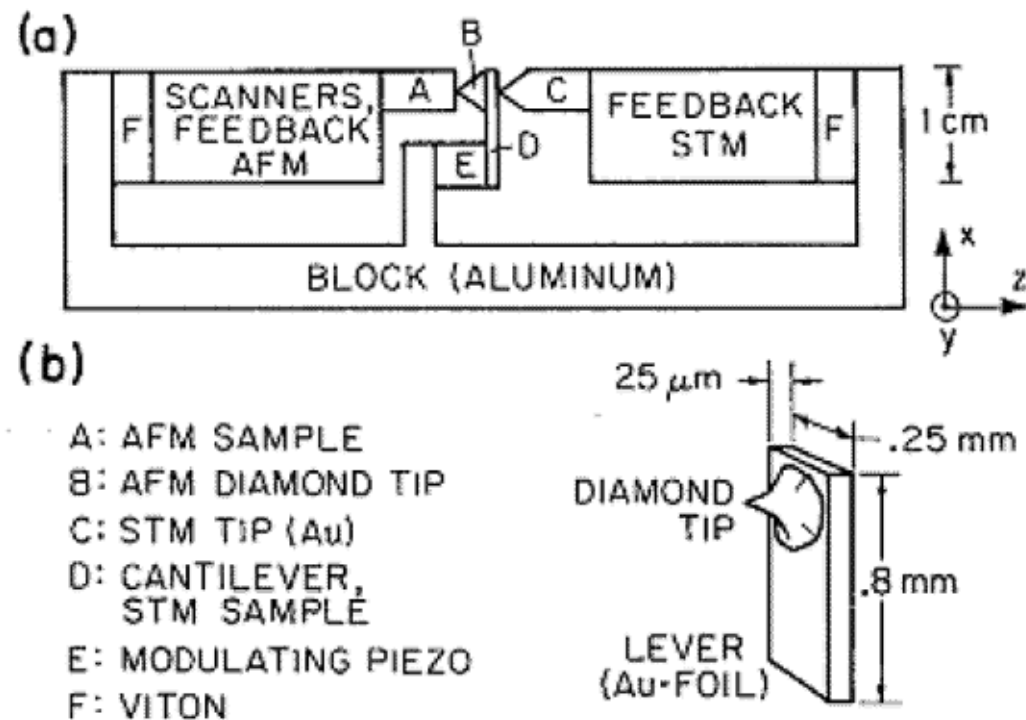
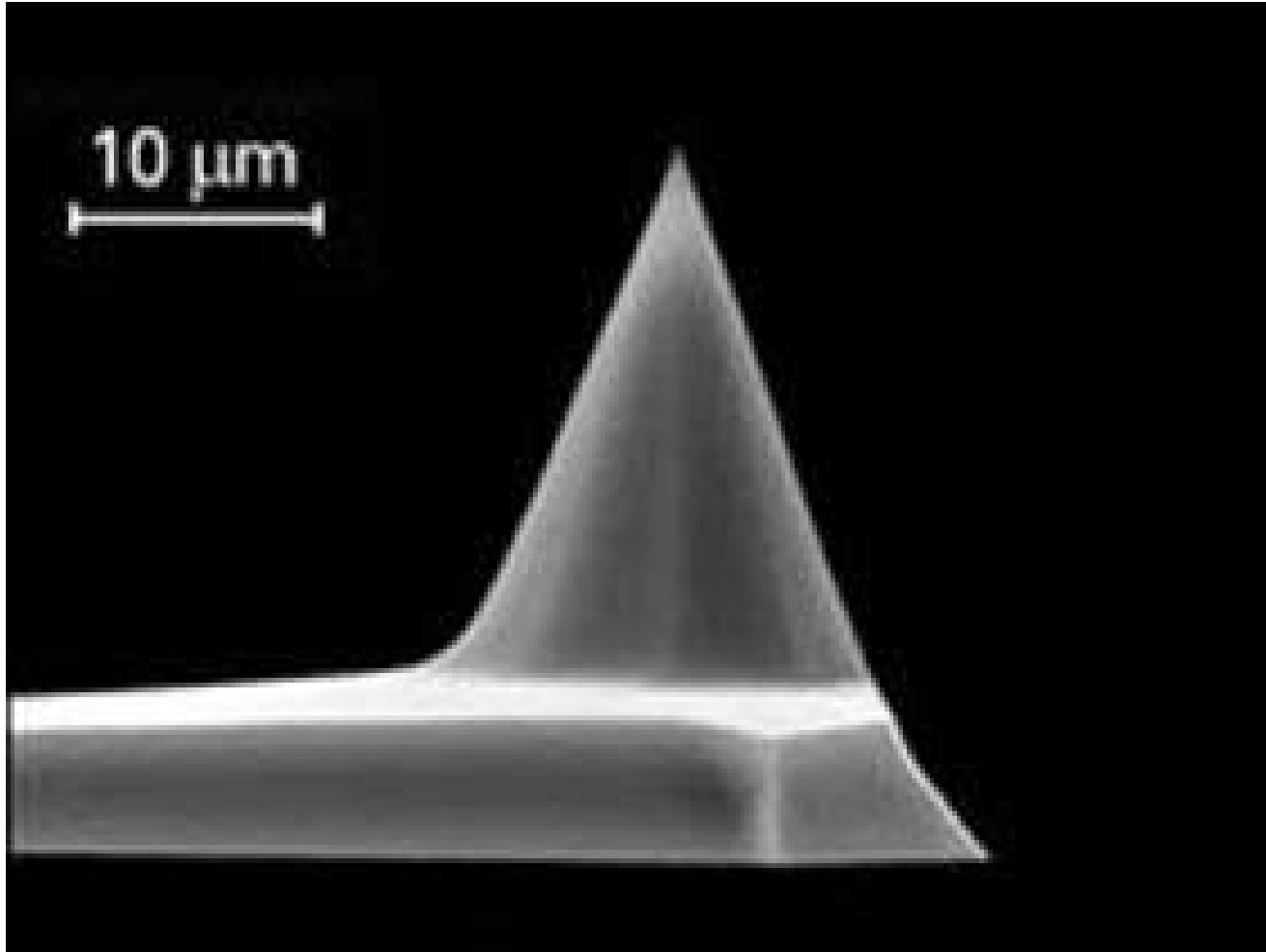
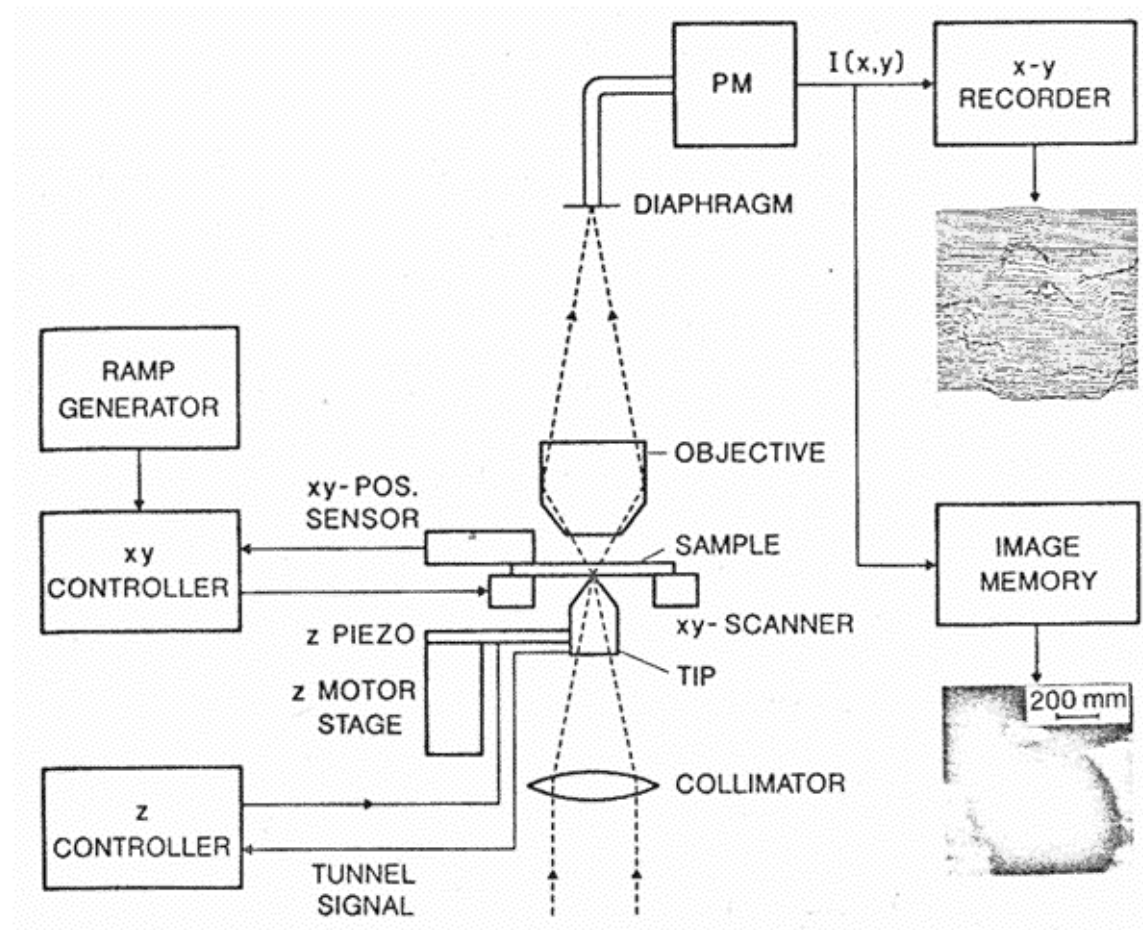


FIG. 2. Experimental setup. The lever is not to scale in (a). Its dimensions are given in (b). The STM and AFM piezoelectric drives are facing each other, sandwiching the diamond tip that is glued to the lever.

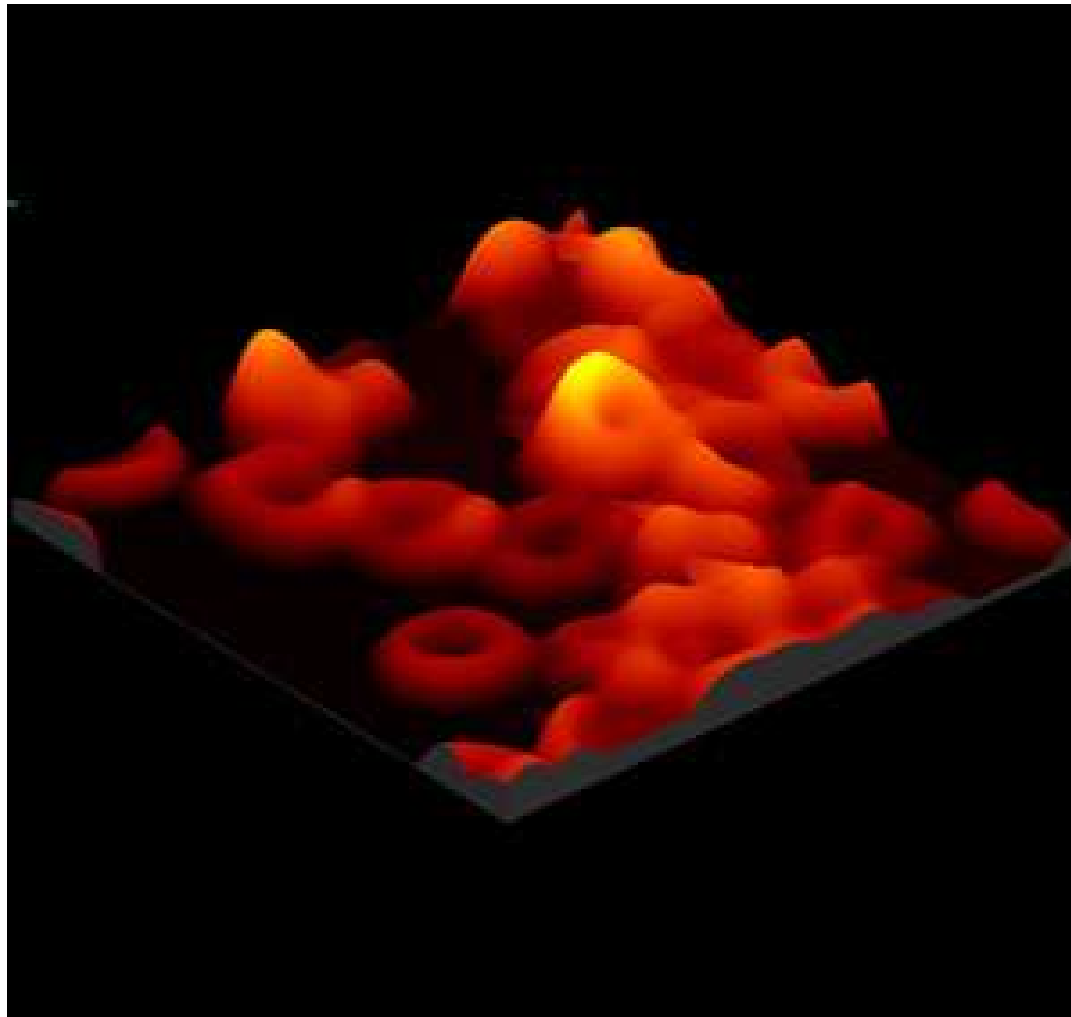
Rasterkraftmikroskop



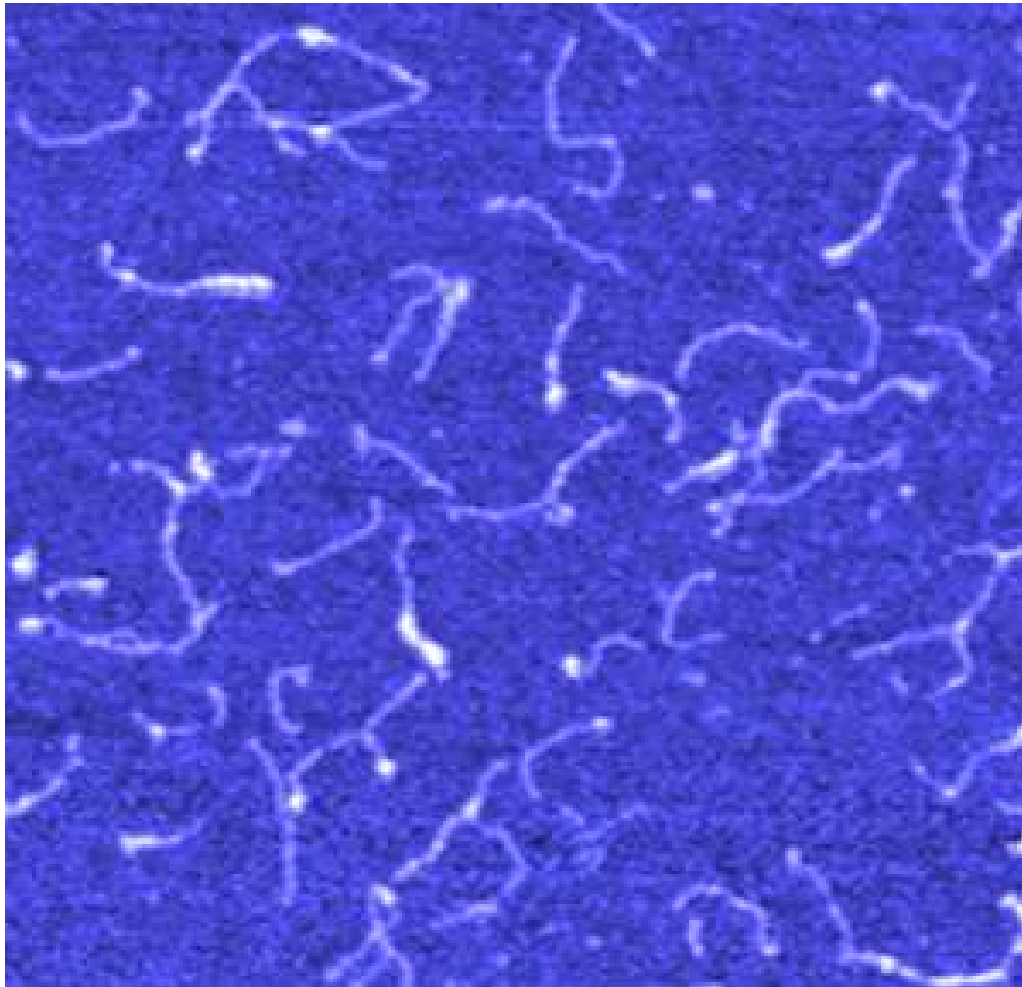
Cantilever-Spitze



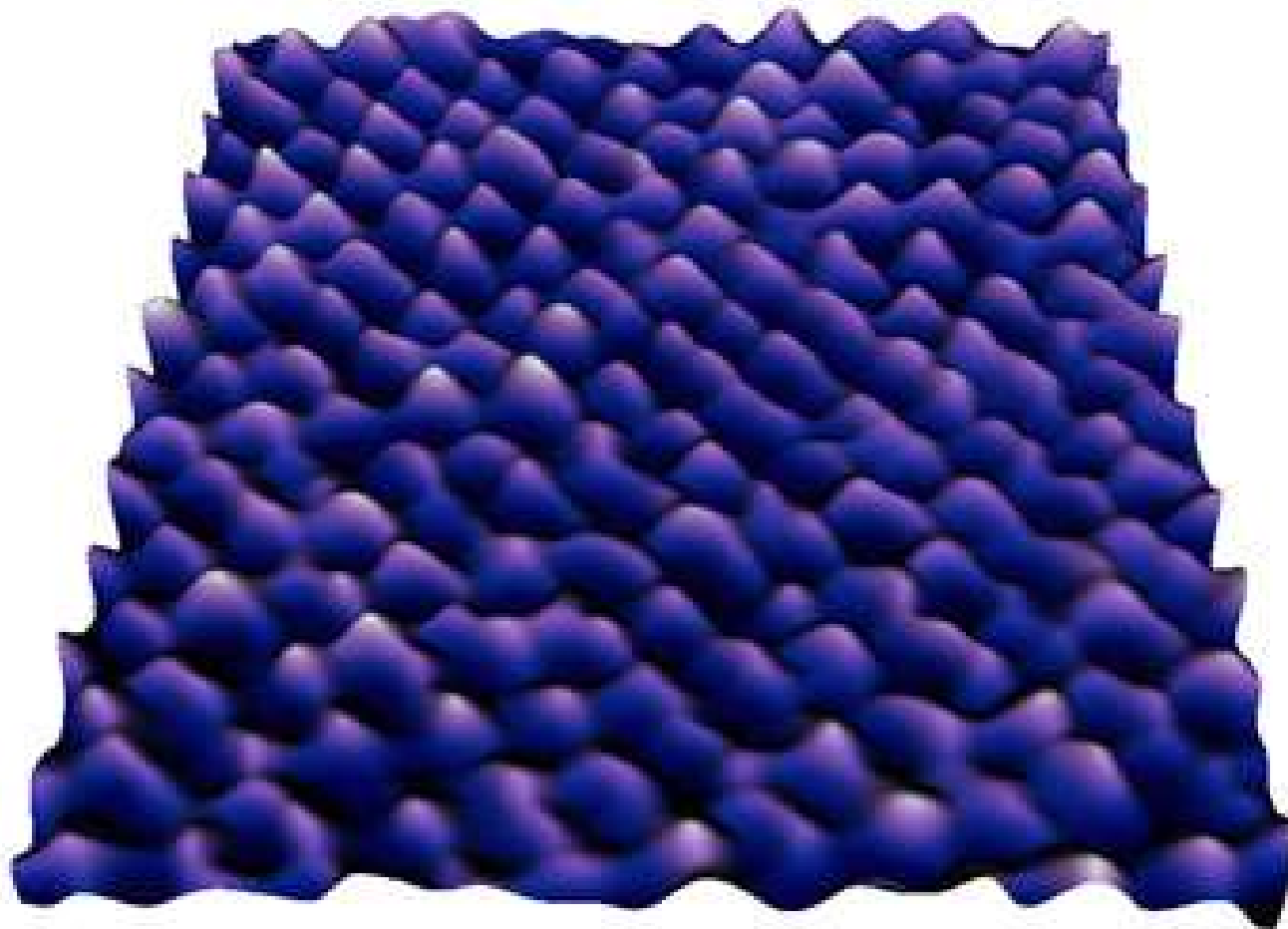
Schemazeichnung Optische Nahfeldmikroskopie



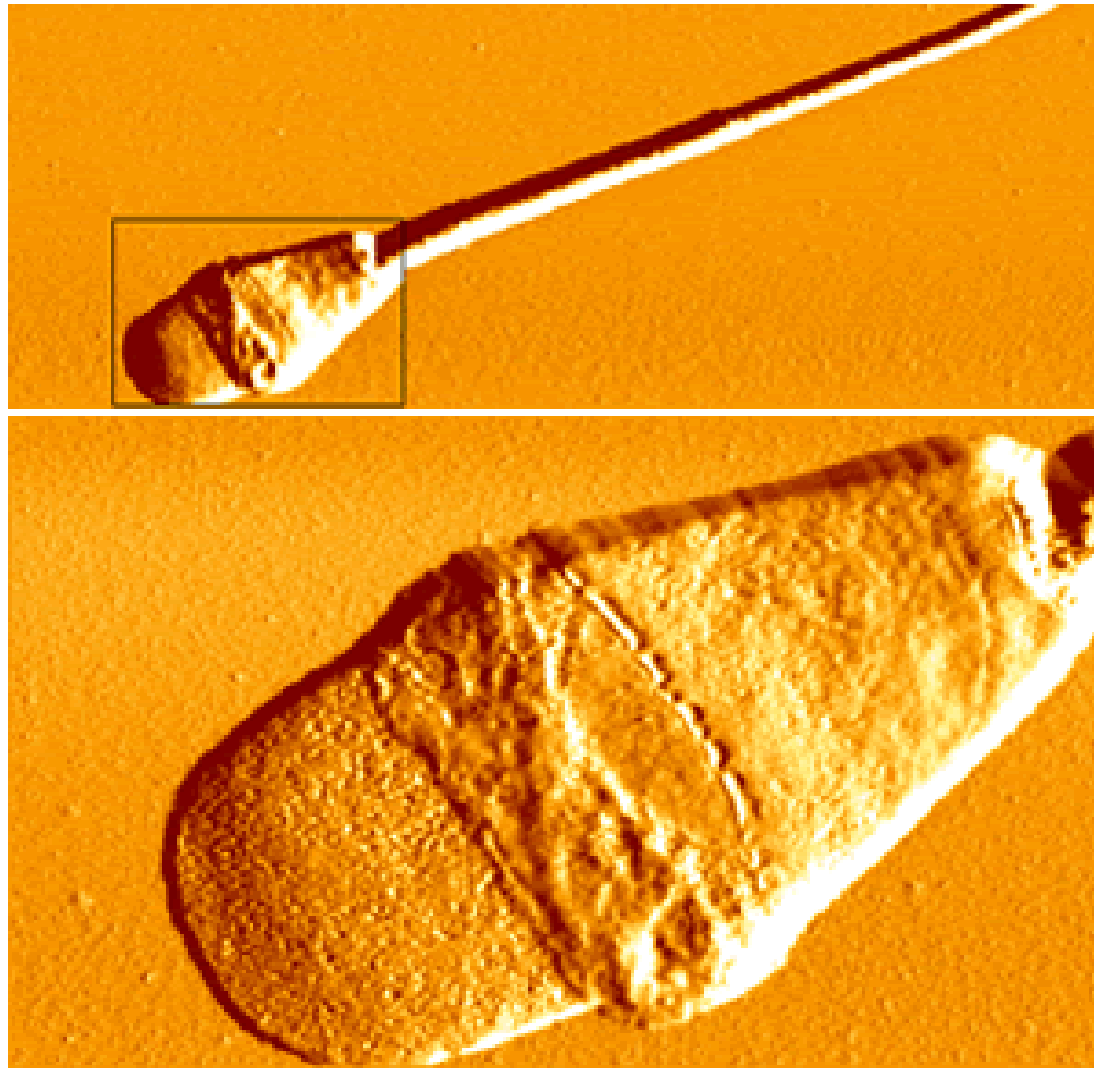
Rote Blutkörperchen (40x40x2.1 μm)



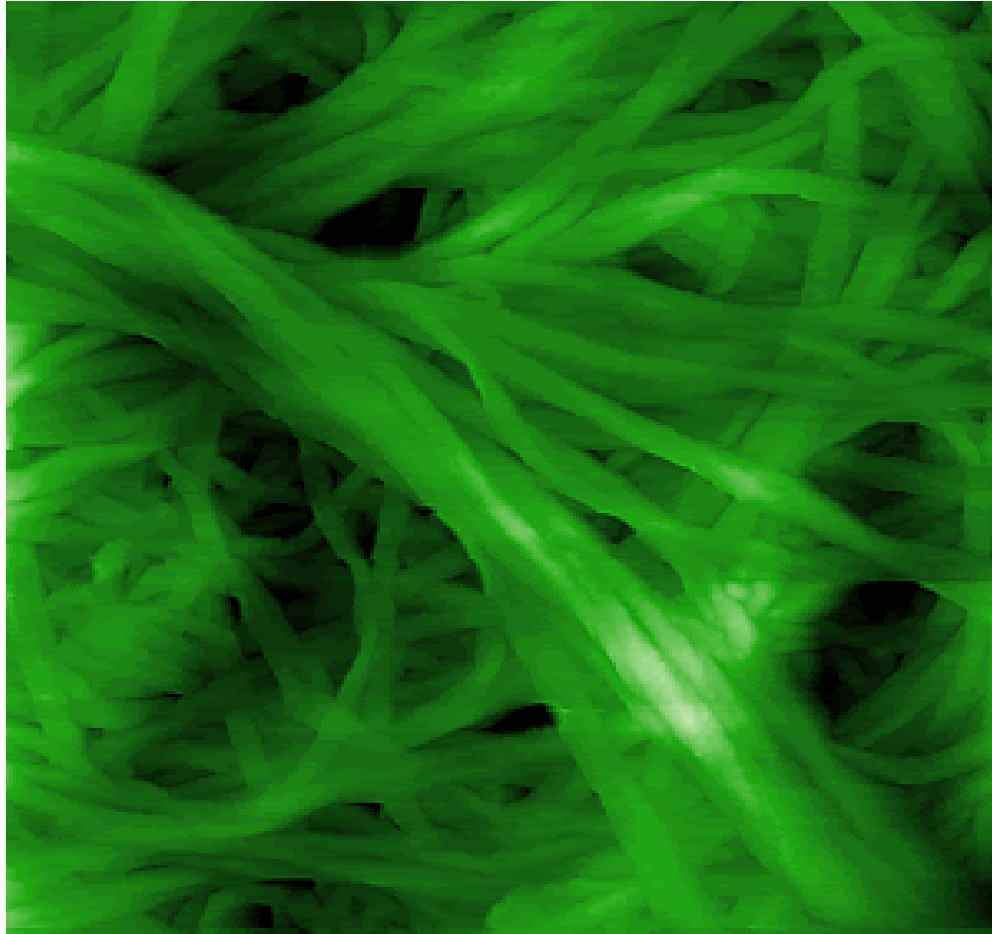
DNS-Fragmente ($1\mu\text{m} \times 1\mu\text{m} \times 42.1\text{nm}$)



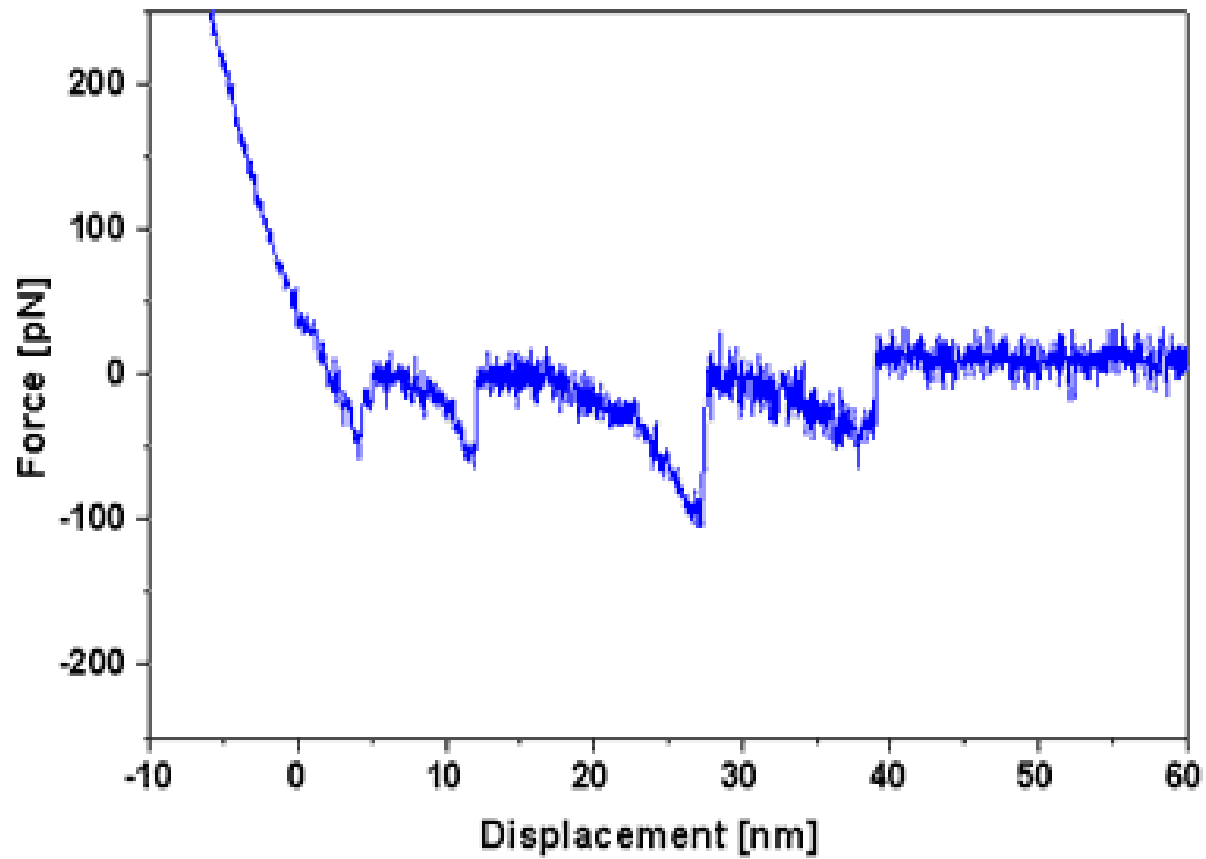
Einzelatome in einem Mica-Kristall (6.6nm x 6.6nm x 0.4 nm)



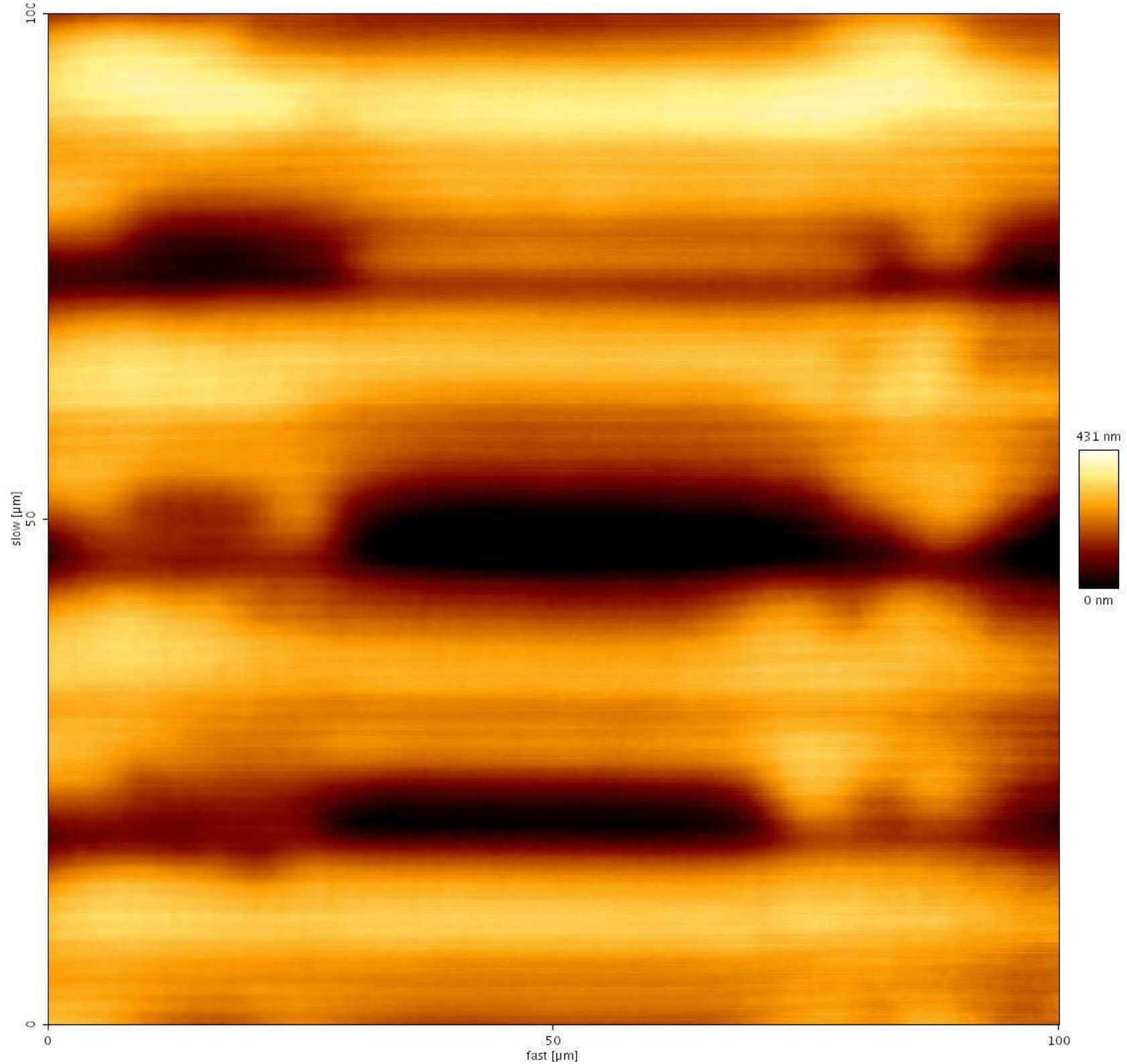
Spermium auf Glassubstrat 40 μm (oben), 11 μm (unten))

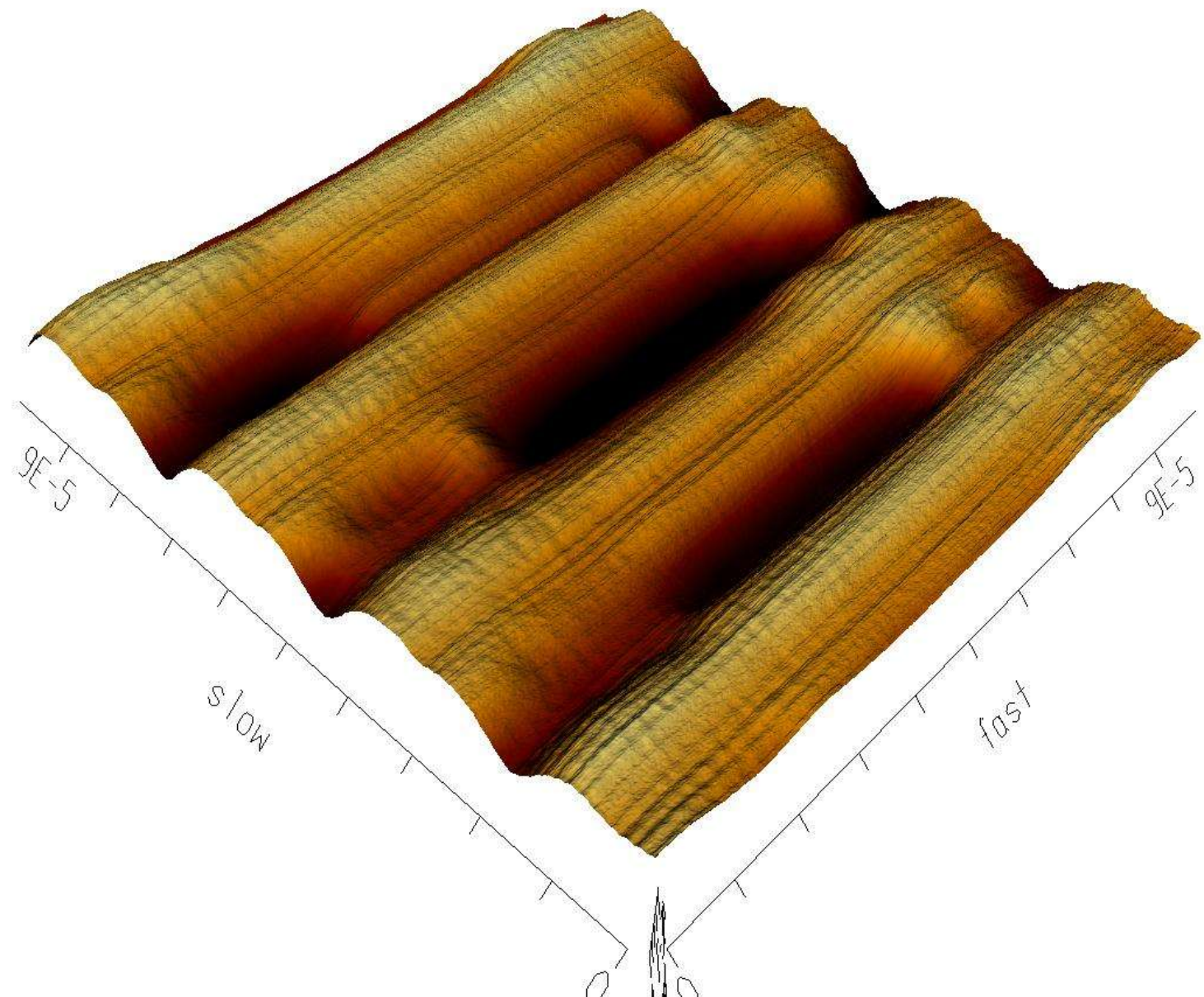


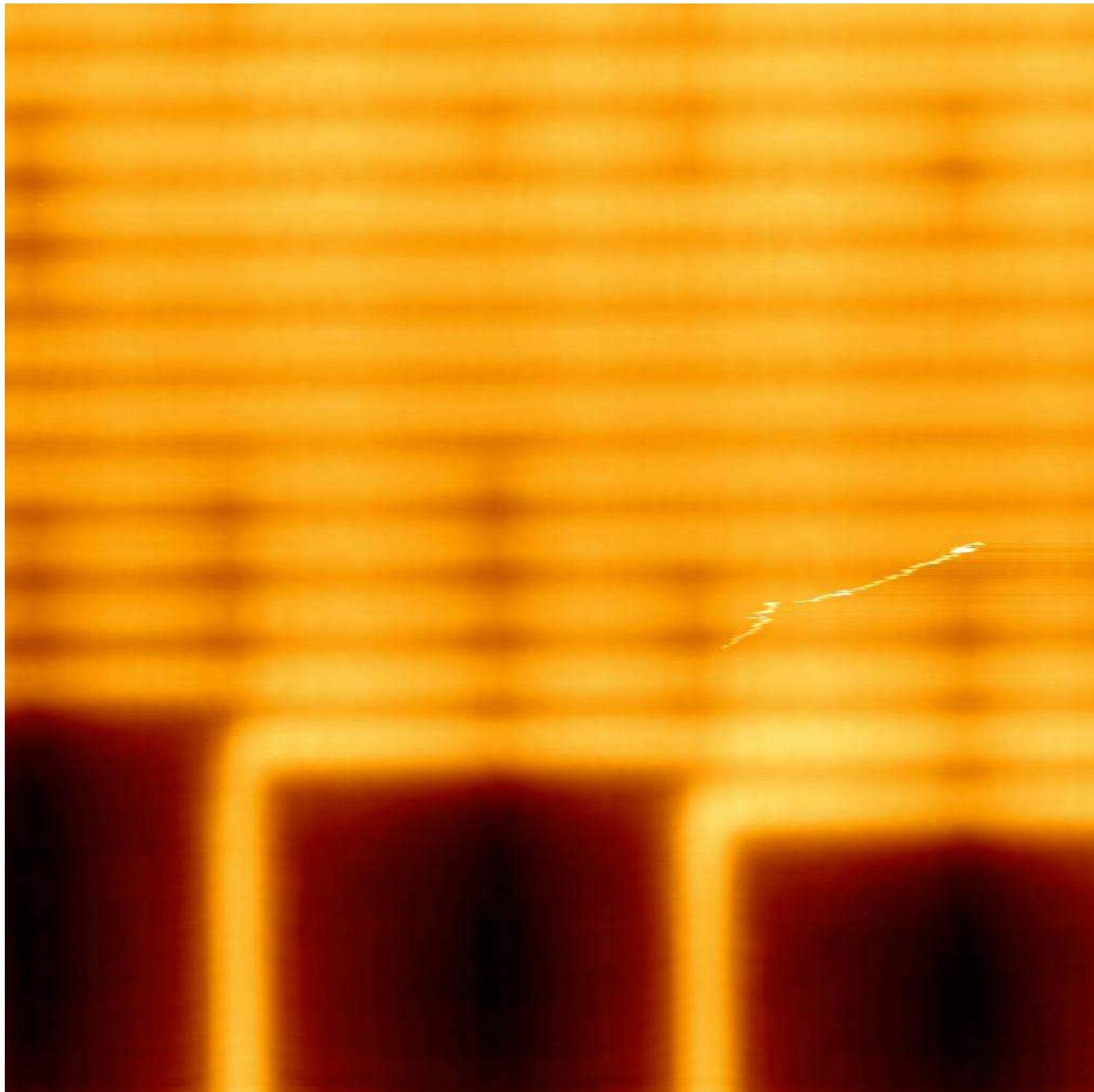
Bakterielle Zellulose ($2\mu\text{m} \times 2\mu\text{m} \times 350\text{nm}$)

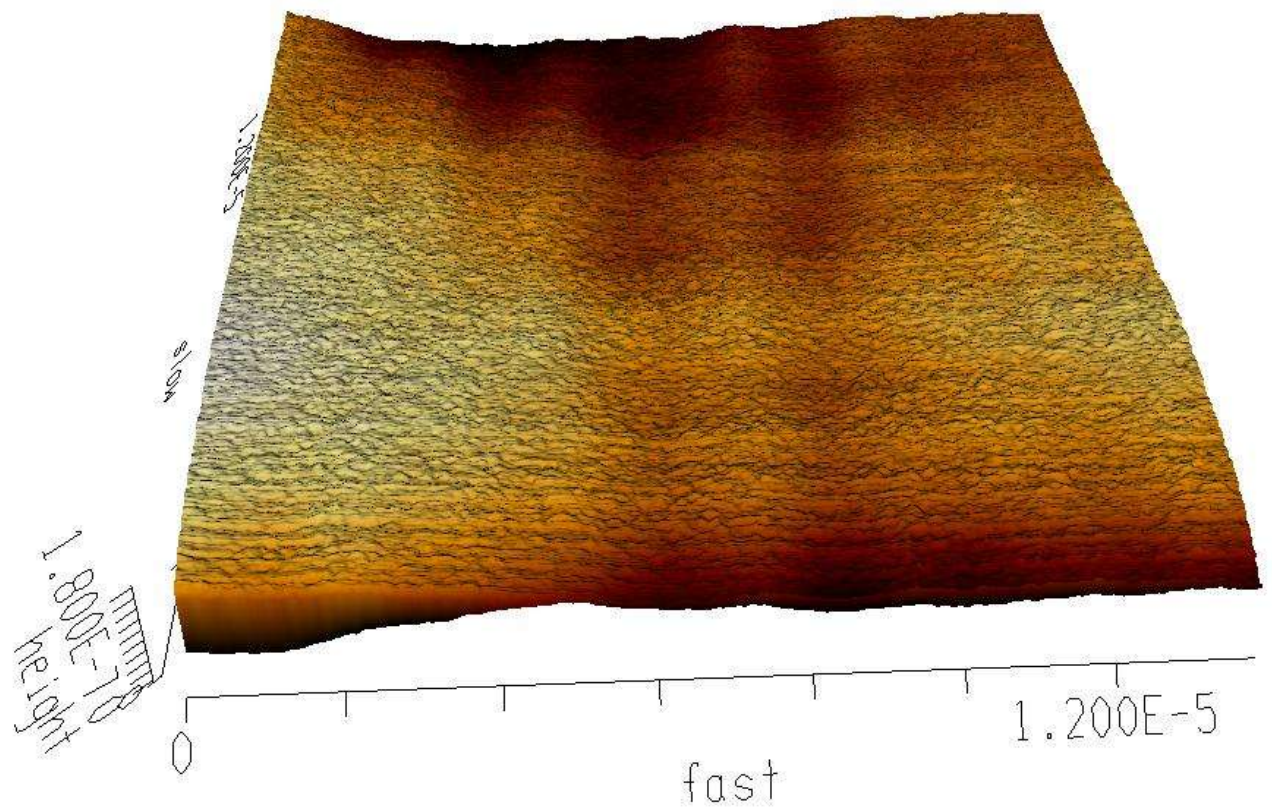


Kraft-Distanz-Kurve der Entfaltung eines Proteins









Quellen

- <http://www.andreas.org/images/afm>
- <http://www.jpik.com/spm/gallery1.htm>
- <http://www.nanoworld.org/english/museum.htm>
- <http://www.spmtips.com/>
- <http://www.almaden.ibm.com/vis/stm/gallery.html>
- Phys. Rev. Lett. V. 27, N 14, 1971, P. 922-924.
- Rev. Sc. Instr. V. 43, N 7, 1972, P. 999-1011.
- Phys. Rev. Lett. 56, 1986, 930-933
- J. Appl. Phys. 59 (10), 1986. 3318-3327