

Characterization of technologically relevant materials from an atomistic perspective

Keywords: Scanning probe microscopy

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Background

- Ultra-high resolution scanning probe microscopy (SPM)

Aim

- To study properties of technologically relevant materials from an atomistic perspective using scanning probe microscopy

Advanced Research Topics



Nano-structures created by laterally manipulating Cu-Phthalocyanine molecules (**left**) and by positioning approximately 700 atoms of silver (**right**) on a Silver surface



CO molecules nucleated close to one-dimensional organometallic molecular structures on a Gold (111) surface.

Publications

- Nature Communications, Vol. 6, page 7265 (2015)
- Nature Nanotechnology, Vol. 4, page 803 (2009)
- Science, Vol. 322, page 413 (2008)

Summary

- Advanced SPM techniques
- Manipulation of atoms and molecules
- Study technological properties of materials

Research outcome

- Publications in high-impact factor journals