

Publication

Atomic Force Microscope

JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

ID 3697945

Author(s) Binnig, G.; Quate, C. F.; Gerber, C.

Author(s) at UniBasel [Gerber, Christoph](#) ;

Year 1986

Title Atomic Force Microscope

Journal Physical Review Letters

Volume 56

Number 9

Pages / Article-Number 930-933

The scanning tunneling microscope is proposed as a method to measure forces as small as 10–18 N. As one application for this concept, we introduce a new type of microscope capable of investigating surfaces of insulators on an atomic scale. The atomic force microscope is a combination of the principles of the scanning tunneling microscope and the stylus profilometer. It incorporates a probe that does not damage the surface. Our preliminary results in air demonstrate a lateral resolution of 30 Å and a vertical resolution less than 1 Å.

Publisher American Physical Society

ISSN/ISBN 0031-9007 ; 1079-7114

edoc-URL <http://edoc.unibas.ch/52112/>

Full Text on edoc Available;

Digital Object Identifier DOI 10.1103/PhysRevLett.56.930

ISI-Number 1986A543600013

Document type (ISI) article