

Publication

Atomic structure of alkali halide surfaces

ConferencePaper (Artikel, die in Tagungsbänden erschienen sind)

ID 171140

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Year 2003

Title Atomic structure of alkali halide surfaces

Editor(s) Kramer, B

Book title (Conference Proceedings) Festkörperprobleme

Volume 43

Place of Conference Spring Meeting of the Arbeitskreis-Festkörperphysik of the Deutsche-Physikalische-Gesellschaft, DRESDEN, GERMANY, MAR 24-28, 2003

Publisher Friedr. Vieweg

Place of Publication Braunschweig

Pages S. 477-485

ISSN/ISBN 3-540-40150-4

The atomic structure of surfaces of alkali halide crystals has been revealed by means of high-resolution dynamic force microscopy. True atomic resolution is demonstrated both on steps surrounding islands or pits, and on a chemically mixed crystal. We have directly observed the enhanced interaction at low-coordinated sites by force microscopy. The growth of NaCl films on metal surfaces and radiation damage in a KBr surface is discussed based on force microscopy results. The damping of the tip oscillation in dynamic force microscopy might provide insight into dissipation processes on the atomic scale. Finally, we present atomically resolved images of wear debris found after scratching a KBr surface.

Series title ADVANCES IN SOLID STATE PHYSICS

edoc-URL <http://edoc.unibas.ch/dok/A5262119>

Full Text on edoc No;

Digital Object Identifier DOI 10.1007/978-3-540-44838-9_34

ISI-Number 000188787700034

Document type (ISI) inproceedings