

PUBLICATIONS ▾

TOPICS ▾

AUTHOR RESOURCES ▾

Webinars & Events

X-RAY SPECTROMETRY



**Volume 36,
Issue 1**
**Special Issue:
Spotlight on: The
2006 EXRS
Conference, Part
1**

January/February
2007

Pages 3-10

Review

Ten years of x-ray holography[†]

G. Faigel  G. Bortel, C. S. Fadley, A. S. Simionovici, M. Tegze

First published: 28 December 2006 |

<https://doi.org/10.1002/xrs.935> | Citations: 16

[†] Paper presented as part of a Special Issue of papers from the 2006 European X-ray Spectrometry Conference, Paris, France, 19–23 June. Part 1.



Related



Information

Abstract

With the appearance of nano-science the role of local methods has become more and more important. Hard x-ray holography based on the inside reference point concept is a local probe of the atomic order in solids. It gives the 3D real space image of atoms without the phase ambiguity inherent to diffraction methods. In this paper a brief description of the basics of hard x-ray holography is given. The last ten years' experimental and evaluation-related developments are reviewed. We also introduce different variants of the method, such as bremsstrahlung and gamma ray holography (GRH). The power of the method is illustrated by examples. We outline new directions and future possibilities. Copyright © 2006 John Wiley & Sons, Ltd.

Recommended

[X-ray spectrometric applications of a synchrotron x-ray microbeam](#)

Atsuo Iida

X-Ray Spectrometry

[Upgrade of the x-ray fluorescence beamline at HASYLAB/DESY](#)

G. Falkenberg O. Clauss
A. Swiderski
Th. Tschentscher

X-Ray Spectrometry

[Differential photoelectron](#)

Citing Literature

Citing Literature



[holography of Cu\(100\)
surface using laboratory-
level X-ray sources](#)

A. Hashimoto A. Suzuki
Y. Kisaka S. Miyasaka
M. Nojima M. Owari
Y. Nihei

**Surface and Interface
Analysis**

[Progress in X-ray
microbeam spectroscopy](#)

Download PDF

About Wiley
Online Library

Privacy Policy

Terms of Use

About Cookies

Manage Cookies

Accessibility

Wiley Research
DE&I Statement
and Publishing
Policies

Help & Support

Contact Us

Training and
Support

DMCA & Reporting
Piracy

Opportunities

Subscription
Agents

Advertisers &
Corporate Partners

Connect with
Wiley

The Wiley Network

Wiley Press Room