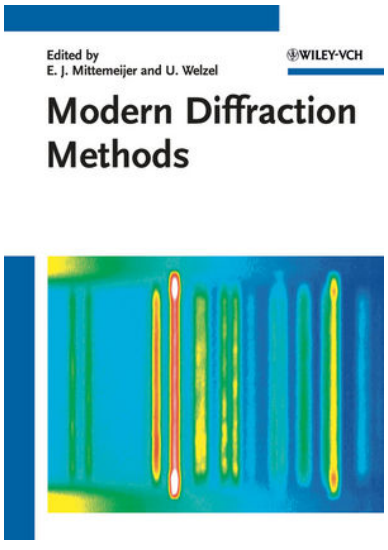

Modern Diffraction Methods

E. J. Mittemeijer (Editor), U. Welzel (Editor)

E-Book	978-3-527-64990-7	February 2013	**$168.99**
Hardcover	978-3-527-32279-4	November 2012	**$210.00**
O-Book	978-3-527-64988-4	January 2013	**Available on Wiley Online Library**

DESCRIPTION

The role of diffraction methods for the solid-state sciences has been pivotal to determining the (micro)structure of a material.

Particularly,

the expanding activities in materials science have led to the development of new methods for analysis by diffraction. This book offers an authoritative overview of the new developments in the field of analysis of matter by (in particular X-ray, electron and neutron) diffraction. It is composed of chapters written by leading experts on 'modern diffraction methods'. The focus in the various chapters of this book is on the current forefront of research on and applications for diffraction methods. This unique book provides descriptions of the 'state of the art' and, at the same time, identifies avenues for future research.

The book assumes only a basic knowledge of solid-state physics and allows the application of the described methods by the readers of the

book (either graduate students or mature scientists).

ABOUT THE AUTHOR

Professor Mittemeijer has led the department 'Phase Transformations in Solids' at the Max Planck Institute for Metals Research since 1998. He has published more than 400 papers in international scientific journals and is a member of the editorial board of various journals, among them "International Materials Reviews", "Journal of Alloys and Compounds", "Zeitschrift für Metallkunde"

and "Zeitschrift für Kristallographie". He is editor/publisher of the journal "HTM Zeitschrift für Werkstoffe Wärmebehandlung Fertigung" and co-editor of the journal "Current Opinion in Solid State & Materials Science". He acts as referee of numerous journals.

Dr Welzel obtained his PhD in 2002 under the supervision of Professor Mittemeijer and serves now as a research scientist and the head of a service laboratory for X-ray diffraction investigations at the Max Planck Institute for Metals Research. His research activities are dedicated to the diffraction analysis of the microstructure of materials and have a strong methodological interest. He has been an editor of the Proceedings of the European Powder Diffraction Conference since 2002, a special issue of the journal "Zeitschrift für Kristallographie" dedicated to 'The State of the Art of Powder Diffration' and acts as referee of numerous journals.
