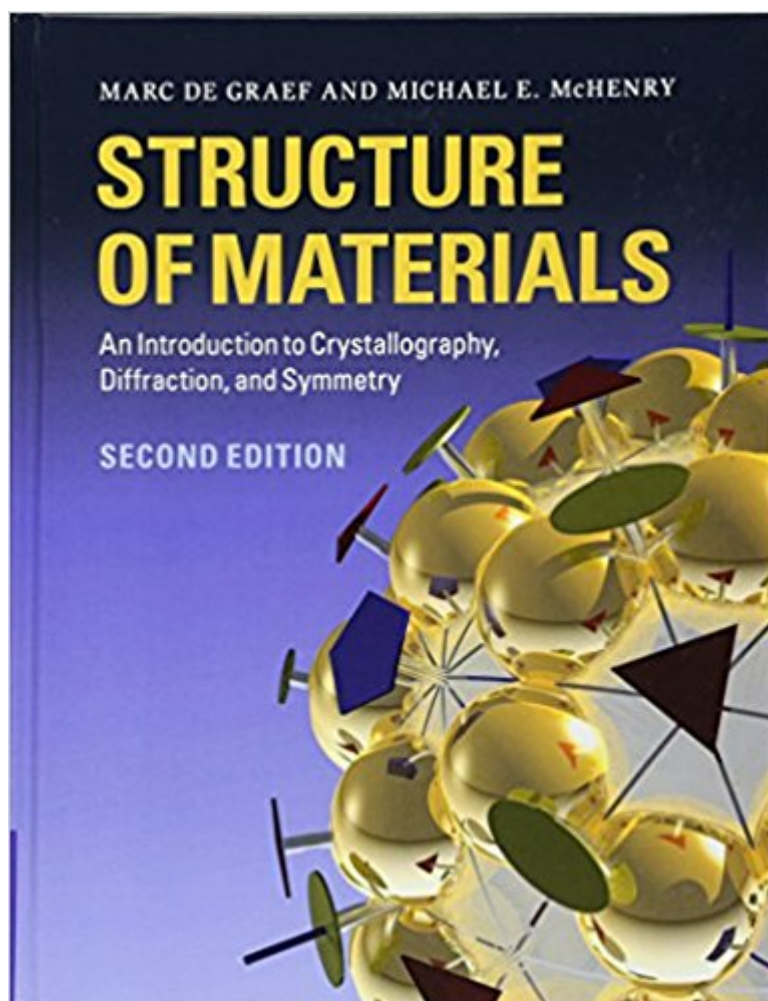




The book was found

Structure Of Materials: An Introduction To Crystallography, Diffraction And Symmetry



Synopsis

This highly readable, popular textbook for upper undergraduates and graduates comprehensively covers the fundamentals of crystallography and symmetry, applying these concepts to a large range of materials. New to this edition are more streamlined coverage of crystallography, additional coverage of magnetic point group symmetry and updated material on extraterrestrial minerals and rocks. New exercises at the end of chapters, plus over 500 additional exercises available online, allow students to check their understanding of key concepts and put into practice what they have learnt. Over 400 illustrations within the text help students visualise crystal structures and more abstract mathematical objects, supporting more difficult topics like point group symmetries. Historical and biographical sections add colour and interest by giving an insight into those who have contributed significantly to the field. Supplementary online material includes password-protected solutions, over 100 crystal structure data files, and Powerpoints of figures from the book.

Book Information

Hardcover: 768 pages

Publisher: Cambridge University Press; 2 edition (October 8, 2012)

Language: English

ISBN-10: 1107005876

ISBN-13: 978-1107005877

Product Dimensions: 7.4 x 1.6 x 9.7 inches

Shipping Weight: 4.2 pounds (View shipping rates and policies)

Average Customer Review: 4.1 out of 5 stars 6 customer reviews

Best Sellers Rank: #118,318 in Books (See Top 100 in Books) #3 in Books > Science & Math > Chemistry > Crystallography #114 in Books > Engineering & Transportation > Engineering > Materials & Material Science > Materials Science #1510 in Books > Science & Math > Earth Sciences

Customer Reviews

The new edition of this highly readable, popular textbook covers the fundamentals of crystallography, symmetry and diffraction and applies these concepts to a large range of materials. Now with new end-of-chapter exercises, more illustrations, more streamlined coverage of crystallography and additional coverage of magnetic point group symmetry.

Marc De Graef is a Professor in the Department of Materials Science and Engineering at Carnegie

Mellon University in Pittsburgh, USA, where he is also Co-director of the J. Earle and Mary Roberts Materials Characterization Laboratory. He received his Ph.D. in Physics in 1989 from the Catholic University of Leuven. An accomplished writer in the field, he is on the Board of Directors for the Minerals, Metals and Materials Society (TMS). Michael E. McHenry is Professor of Materials Science and Engineering, with an appointment in Physics, at Carnegie Mellon University in Pittsburgh, USA. He received his Ph.D. in Materials Science and Engineering in 1988 from the Massachusetts Institute of Technology, before which he spent three years working in industry as a process engineer. Also an accomplished writer, he is Publication Chair for the Magnetism and Magnetic Materials (MMM) Conference.

The book covers a lot of material essential to understanding materials science in a fairly competent manner. Easy to read and follow.

This is an introductory book dedicated to the structures of a broad range of materials from metals to polymers. The author provides a comprehensive yet clear presentation about metallic and ceramic materials. The discussion on organic materials is just brief. One may refer to other textbooks if organic materials are of interest.

good

Love this book

I don't know about the editorial content, but the printing is defective. Many of the first hundred pages were printed with plates that were dripping with excess ink. The attached images are from scans with a black background, so this is no optical bleed-through, it's soaking-wet ink bleed-through. The verso says "Printed in the United Kingdom at the University Press, Cambridge." They must have had a pint too many.

school

[Download to continue reading...](#)

Structure of Materials: An Introduction to Crystallography, Diffraction and Symmetry The Basics of Crystallography and Diffraction (International Union of Crystallography Texts on Crystallography)
The Basics of Crystallography and Diffraction: Fourth Edition (International Union of Crystallography

Texts on Crystallography) The Basics of Crystallography and Diffraction: Third Edition (International Union of Crystallography Texts on Crystallography) International Tables for Crystallography, Space-Group Symmetry (IUCr Series. International Tables of Crystallography) Crystal Structure Analysis: Principles and Practice (International Union of Crystallography Monographs on Crystallography) X-Ray Crystallography: An Introduction to the Investigation of Crystals by Their Diffraction of Monochromatic X-Radiation Minerals and Rocks: Exercises in Crystal and Mineral Chemistry, Crystallography, X-ray Powder Diffraction, Mineral and Rock Identification, and Ore Mineralogy The Rietveld Method (International Union of Crystallography Monographs on Crystallography) Properties of Materials: Anisotropy, Symmetry, Structure Symmetry Rules: How Science and Nature Are Founded on Symmetry (The Frontiers Collection) Structure Determination by X-ray Crystallography: Analysis by X-rays and Neutrons Structure Determination by X-ray Crystallography High Energy Electron Diffraction and Microscopy (Monographs on the Physics and Chemistry of Materials) Fundamentals of Powder Diffraction and Structural Characterization of Materials, Second Edition Symmetry and Structure: Readable Group Theory for Chemists Symmetry and Structure The Structure of Materials (Mit Series in Materials Science and Engineering) Crystallography and Crystal Chemistry: Introduction to the Geometry of the Solid State Crystallography: An Introduction

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)