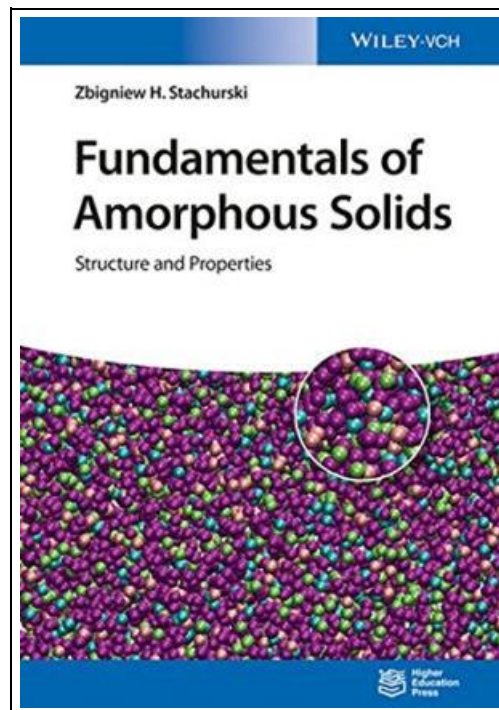


## Fundamentals of Amorphous Solids



Filesize: 2.96 MB

### **Reviews**

*This is actually the greatest pdf i actually have read until now. it absolutely was writtern really properly and beneficial. Your life period will be change when you complete looking over this pdf.*

**(Lurline Little)**

## FUNDAMENTALS OF AMORPHOUS SOLIDS


[DOWNLOAD PDF](#)

Condition: New. Publisher/Verlag: Wiley-VCH | Structure and Properties | Adopting a unique approach, this textbook meets the long-felt need for convincing concepts to describe amorphous solids. It replaces vague notions of amorphous materials as disordered crystalline solids with the well-founded concept of ideal amorphous solids. | Long awaited, this textbook fills the gap for convincing concepts to describe amorphous solids. Adopting a unique approach, the author develops a framework that lays the foundations for a theory of amorphousness. He unravels the scientific mysteries surrounding the topic, replacing rather vague notions of amorphous materials as disordered crystalline solids with the well-founded concept of ideal amorphous solids. A classification of amorphous materials into inorganic glasses, organic glasses, glassy metallic alloys, and thin films sets the scene for the development of the model of ideal amorphous solids, based on topology- and statistics-governed rules of three-dimensional sphere packing, which leads to structures with no short, mid or long-range order. This general model is then concretized to the description of specific compounds in the four fundamental classes of amorphous solids, as well as amorphous polyethylene and poly(methyl) methacrylate, emphasizing its versatility and descriptive power. Finally, he includes example applications to indicate the abundance of amorphous materials in modern-day technology, thus illustrating the importance of a better understanding of their structure and properties. Equally ideal as supplementary reading in courses on crystallography, mineralogy, solid state physics, and materials science where amorphous materials have played only a minor role until now. | CHAPTER 1: INTRODUCTION Classification of Amorphous Materials: Inorganic Glasses, Organic Glasses, Glassy Metallic Alloys, Thin Films CHAPTER 2: APPLICATION EXAMPLES Rewriteable DVDs: Amorphous-to-Crystalline Transformation Amorphous Silicon for Solar Cells Amorphous Silica for Optical Fibres in Telecommunications Amorphous PMMA -UV Resistant Light Covers Amorphous Metallic Glass -Vitr alloy CHAPTER 3: PACKING OF SPHERES Geometry of Spheres, Packing of Spheres and Neighbours Irregular Random Clusters, Their Packing Arrangement by Fürth Combinatorics...


[Read Fundamentals of Amorphous Solids Online](#)

[Download PDF Fundamentals of Amorphous Solids](#)

## You May Also Like



**Art appreciation (travel services and hotel management professional services and management expertise secondary vocational education teaching materials supporting national planning book)(Chinese Edition)**  
paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Pages Number: 146 Publisher: Higher Education Pub. Date :2009-07-01 version 2. This book is...

[Download ePub »](#)



**Applied Undergraduate Business English family planning materials: business knowledge REVIEW (English) (Chinese Edition)**  
paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Paperback. Pub Date: 2012 Pages: 240 Language: English Publisher: Foreign Economic and Trade University...

[Download ePub »](#)



**Too Old for Motor Racing: A Short Story in Case I Didnt Live Long Enough to Finish Writing a Longer One**  
Balboa Press. Paperback. Book Condition: New. Paperback. 106 pages. Dimensions: 9.0in. x 6.0in. x 0.3in.We all have dreams of what we want to do and who we want to become. Many of us eventually decide...

[Download ePub »](#)



**On the seventh grade language - Jiangsu version supporting materials - Tsinghua University Beijing University students efficient learning**  
paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Pages Number: 116 Publisher: Beijing Education Press Pub. Date :2009-6-1. Colorful three-dimensional law degree...

[Download ePub »](#)



**Games with Books : 28 of the Best Childrens Books and How to Use Them to Help Your Child Learn - From Preschool to Third Grade**

Book Condition: Brand New. Book Condition: Brand New.

[Download ePub »](#)