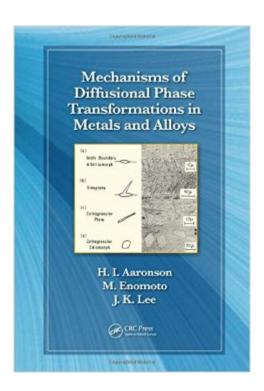
The book was found

Mechanisms Of Diffusional Phase Transformations In Metals And Alloys





Synopsis

Developed by the late metallurgy professor and master experimentalist Hubert I. Aaronson, this collection of lecture notes details the fundamental principles of phase transformations in metals and alloys upon which steel and other metals industries are based. Mechanisms of Diffusional Phase Transformations in Metals and Alloys is devoted to solid-solid phase transformations in which elementary atomic processes are diffusional jumps, and these processes occur in a series of so-called nucleation and growth through interface migration. Instead of relying strictly on a pedagogical approach, it documents the evolution of phase transformation concepts. The authors present topics by describing a phenomenon and then following up with a corresponding hypothesis or alternative explanation. In this way, the book also shows how the field continues to evolve and meet new challenges. Integrated with information from a number of key papers and review articles, this volume reflects this revered and influential instructorâ ™s unique and passionate way of introducing well-established theories and knowledge in a systematic way, at the same time introducing, in great detail, how a new idea or interpretation of a phenomenon has emerged, evolved, and gained its current status. If the published version of a theory or a model was too condensed. Aaronson worked the problem out in painstaking detail so that graduate students could follow the derivations. This collection is full of such unique "Aaronsonian idiosyncrasies," which add immense value as a powerful tool for learning in this challenging materials field.

Book Information

Hardcover: 685 pages

Publisher: CRC Press; 1 edition (May 19, 2010)

Language: English

ISBN-10: 1420062999

ISBN-13: 978-1420062991

Product Dimensions: 7 x 1.6 x 10 inches

Shipping Weight: 3 pounds (View shipping rates and policies)

Average Customer Review: 4.0 out of 5 stars Â See all reviews (1 customer review)

Best Sellers Rank: #1,896,127 in Books (See Top 100 in Books) #182 in Books > Engineering &

Transportation > Engineering > Materials & Material Science > Extraction & Processing #470

in Books > Engineering & Transportation > Engineering > Materials & Material Science >

Metallurgy #657 in Books > Science & Math > Physics > Solid-State Physics

Customer Reviews

Very good book! Diffusional phase transformations treated as they deserve! An excelent textbook for graduate courses in Materials Science or Metallurgical engineering.

Download to continue reading...

Mechanisms of Diffusional Phase Transformations in Metals and Alloys Fundamentals of Creep in Metals and Alloys, Second Edition PeriAnesthesia Nursing Core Curriculum: Preprocedure, Phase I and Phase II PACU Nursing, 3e PeriAnesthesia Nursing Core Curriculum: Preprocedure, Phase I and Phase II PACU Nursing Advanced Organic Chemistry: Part A: Structure and Mechanisms: Structure and Mechanisms Pt. A Percutaneous Absorption:

Drugs--Cosmetics--Mechanisms--Methodology: Drugs--Cosmetics--Mechanisms--Methodology, Third Edition. (Drugs and the Pharmaceutical Sciences) Schaechter's Mechanisms of Microbial Disease (Mechanisms of Microbial Disease (Schaechter)) ISO 12215-3:2002, Small craft - Hull construction and scantlings - Part 3: Materials: Steel, aluminium alloys, wood, other materials Semiconductors and Semimetals, Vol. 19: Deep Levels, GaAs, Alloys, Photochemistry The Handbook of Alternative Assets: Making money from art, rare books, coins and banknotes, forestry, gold and precious metals, stamps, wine and other alternative assets Transformations Of Coordinates, Vectors, Matrices And Tensors Part I: LAGRANGE'S EQUATIONS, HAMILTON'S EQUATIONS, SPECIAL THEORY OF RELATIVITY AND CALCULUS ... Mathematics From 0 And 1 Book 16) Advances in Powder Metallurgy: Properties, Processing and Applications (Woodhead Publishing Series in Metals and Surface Engineering) Superplasticity and Grain Boundaries in Ultrafine-Grained Materials (Woodhead Publishing Series in Metals and Surface Engineering) Science and Technology in the Global Cold War (Transformations: Studies in the History of Science and Technology) Toward Sustainable Communities: Transition and Transformations in Environmental Policy (American and Comparative Environmental Policy) CONNECTED MATHEMATICS 3 STUDENT EDITION GRADE 8 BUTTERFLIES PINWHEELS AND WALLPAPER: SYMMETRY AND TRANSFORMATIONS COPYRIGHT 2014 The Beginner's Guide to Gold and Silver Scrap: Basic Fundamentals for Buying Scrap Precious Metals Annie Sloan's Painted Kitchen: Paint Effect Transformations for Walls, Cupboards, and Furniture Quick and Easy Paint Transformations: 50 step-by-step ways to makeover your home for next to nothing Materials Processing: A Unified Approach to Processing of Metals, Ceramics and Polymers

Dmca