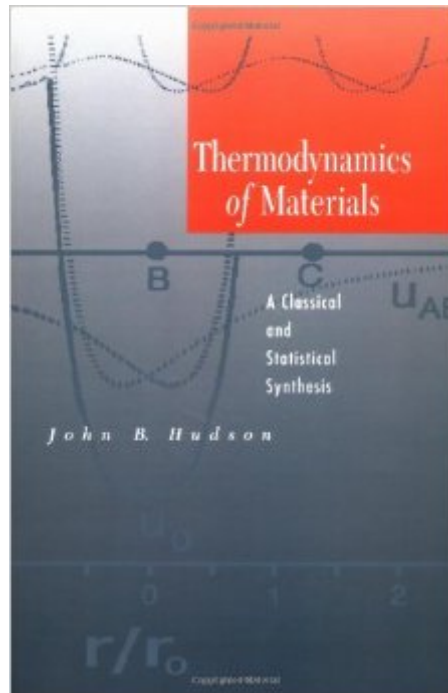


The book was found

Thermodynamics Of Materials: A Classical And Statistical Synthesis



Synopsis

Thermodynamics of Materials A Classical and Statistical Synthesis Designed as a reference resource for practicing professionals as well as a text for advanced students, Thermodynamics of Materials offers a lucid presentation that ties together classical and statistical treatments of thermodynamics within the framework of materials science. Unlike most books in the field, it emphasizes the natural connection between these two approaches, both as a way of obtaining useful information about real systems, and as a way of showing the relations between the molecular-level properties of systems, and their properties on a macroscopic scale. In this regard, the author's aim throughout the text is to introduce the rigorous, general relations that arise from classical thermodynamics, which are system independent, and then to use statistical thermodynamic relations to calculate the expected values of the macroscopic thermodynamic parameters of the systems. Thermodynamics of Materials includes a review of classical thermodynamics, an introduction to statistical thermodynamics, and numerous practical problems in thermodynamics, especially those involving phase and chemical equilibrium. Handy appendices enhance the value of this outstanding text.

Book Information

Hardcover: 365 pages

Publisher: Wiley-Interscience; 1 edition (January 1996)

Language: English

ISBN-10: 047131143X

ISBN-13: 978-0471311430

Product Dimensions: 6.4 x 1.1 x 9.7 inches

Shipping Weight: 1.5 pounds (View shipping rates and policies)

Average Customer Review: 3.0 out of 5 stars See all reviews (2 customer reviews)

Best Sellers Rank: #1,436,807 in Books (See Top 100 in Books) #184 in Books > Science & Math > Physics > Nanostructures #609 in Books > Science & Math > Physics > Dynamics > Thermodynamics #1054 in Books > Engineering & Transportation > Engineering > Bioengineering > Biotechnology

Customer Reviews

This book is used at a Graduate Student level. The Grad students using this for a course either should have taken undergraduate thermodynamics or will need to fill in their gaps of knowledge. Also, the first five chapters, rightfully labeled "Part I Review of Classical

Thermodynamics" give a pretty good review of the basic thermodynamics any student using this book would need to know. The book is also very concise, getting straight to the meat of the theory and knowledge you need, instead of being overly wordy. It was a difficult but good class when I took it.-Former Material Science Undergrad and Graduate student

This book assumes you have a very good working knowledge of thermodynamics. Otherwise there are many web site that provide better examples, clarity and examples.

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

Thermodynamics With Quantum Statistical Illustrations. Monographs in Statistical Physics and Thermodynamics, Volume 2 Thermodynamics of Materials: A Classical and Statistical Synthesis Thermodynamics, Statistical Thermodynamics, & Kinetics (3rd Edition) Molecular Driving Forces: Statistical Thermodynamics in Biology, Chemistry, Physics, and Nanoscience, 2nd Edition Thermodynamics and Statistical Mechanics: An Integrated Approach (Cambridge Series in Chemical Engineering) Molecular Driving Forces: Statistical Thermodynamics in Biology, Chemistry, Physics, and Nanoscience, Second Edition An Introduction to Statistical Thermodynamics (Dover Books on Physics) Elementary Stochastic Calculus With Finance in View (Advanced Series on Statistical Science & Applied Probability, Vol 6) (Advanced Series on Statistical Science and Applied Probability) Thermodynamics in Materials Science, Second Edition Introduction to the Thermodynamics of Materials, Fifth Edition The Organic Chemistry of Drug Synthesis, Volume 3 (Organic Chemistry Series of Drug Synthesis) Statistical Physics of Macromolecules (Polymers and Complex Materials) Easy Classical Guitar & Melodica Duets: Featuring music of Bach, Mozart, Beethoven, Wagner and others. For Classical Guitar and Melodica. In Standard Notation and Tablature. The Record Shelf Guide to Classical CDs and Audiocassettes: Fifth Revised and Expanded Edition (Insider's Guide to Classical Recordings) A Rasa Reader: Classical Indian Aesthetics (Historical Sourcebooks in Classical Indian Thought) Low-Dimensional and Nanostructured Materials and Devices: Properties, Synthesis, Characterization, Modelling and Applications (NanoScience and Technology) Optical Interconnects (Synthesis Lectures on Solid-State Materials and Devices) Physics for Scientists and Engineers, Vol. 1, 6th: Mechanics, Oscillations and Waves, Thermodynamics, Chemical, Biochemical, and Engineering Thermodynamics Physical Chemistry: Thermodynamics, Structure, and Change

[Dmca](#)