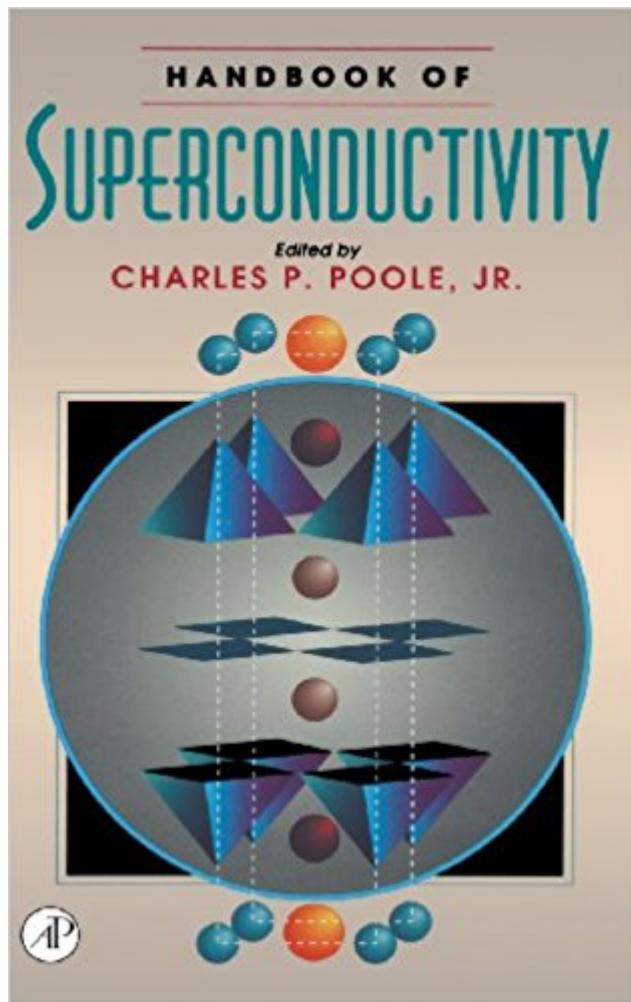


The book was found

# Handbook Of Superconductivity



## **Synopsis**

The field of superconductivity has tremendous potential for growth and further development in industrial applications. The subject continues to occupy physicists, chemists, and engineers interested in both the phenomena itself and possible financially viable industrial devices utilizing the physical concepts. For the past five years, within the publications of the American Physical Society, for example, 40%-60% of all articles submitted to major journals in the area of Solid State Physics have been on the subject of superconductivity, including the newer, extremely important subfield of high temperature superconductivity (high T<sub>c</sub>). The present volume is the first handbook to address this field. It covers both "classic" superconductivity-related topics and high T<sub>c</sub>. Numerous properties, including thermal, electrical, magnetic, mechanical, phase diagrams, and spectroscopic crystallographic structures are presented for many types of superconductors. Critical fields, critical currents, coherence lengths, penetration depths, and transition temperatures are tabulated. First handbook on Superconductivity Coherence lengths and depths are tabulated Crystallographic structures of over 100 superconductor types Main results of several theories are submitted Phase diagrams for synthesizing new superconductors are included

## **Book Information**

Hardcover: 693 pages

Publisher: Academic Press; 1 edition (October 29, 1999)

Language: English

ISBN-10: 0125614608

ISBN-13: 978-0125614603

Product Dimensions: 5.8 x 1.6 x 9 inches

Shipping Weight: 2.5 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars 1 customer review

Best Sellers Rank: #2,022,952 in Books (See Top 100 in Books) #84 in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Superconductivity #334 in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Semiconductors #529 in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Microelectronics

## **Customer Reviews**

The first handbook in this field, the Handbook of Superconductivity covers both classic superconductivity related topics and the new high temperature superconductivity. Numerous

properties including thermal, electrical, magnetic, mechanical, phase diagrams and spectroscopic crystallographic structures are presented for many superconductor types. Critical fields, critical currents, coherence lengths, penetration depths and transition temperatures are tabulated. Key Features First handbook on SuperconductivityCoherence lengths and depths are tabulatedCrystallographic structures of over 100 superconductor typesMain results of several theories are submittedPhase diagrams for synthesizing new superconductors are included Dr. Charles Poole is Professor Emeritus of the Physics Department at the University of South Carolina and was appointed a fellow of the International EPR/ESR Society at the Rocky Mountain conference held in Denver in July of 1998. Professor Poole has carried out significant research in ferroelectrics and phase transitions in solids. For twenty years he edited the journal Magnetic Resonance Review and has been on the editorial board of the Bulletin of Magnetic Resonance.

Dr. Farach has received international, national, and university awards. He is a member of the Academy of Science of Argentina and a Fellow of the American Society. My research is in the area of theoretical condensed matter physics, especially the foundations of statistical physics. I have published extensively in the area of critical phenomena and phase transitions, including the text "Introduction to Renormalization Group Methods in Physics" with my co-authors Horacio Farach and Charles Poole. My most recent interests focus on numerical simulation of the mixed state in type-I superconductors, the analytical properties of the partition function, and the origins irreversibility.

Later this year I, the present author, will publish with my colleagues Horacio Farach, Ruslan Prozorov and Rick Creswick the 3rd edition of our book Superconductivity. When I began work many years ago I was in an atmosphere of PUBLISH OR PERISH, now at the age of 86 I find myself in an atmosphere of STAY ACTIVE OR PERISH, so I keep writing.

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

Handbook of Superconductivity Type II Superconductivity (International series of monographs in natural philosophy) Introduction to Superconductivity: Second Edition (Dover Books on Physics) (Vol i) Superconductivity, Superfluids, and Condensates (Oxford Master Series in Physics) Superconductivity: A Very Short Introduction Superfluidity and Superconductivity (Graduate Student Series in Physics) Theory of Nonequilibrium Superconductivity (International Series of Monographs on Physics) Superconductivity: A Very Short Introduction (Very Short Introductions) Superconductivity and Superconducting Wires (Horizons in World Physics) One-Dimensional Superconductivity in Nanowires Superconductivity Of Metals And Alloys (Advanced Books Classics)

RF Superconductivity: Science, Technology and Applications (v. 2) High-Temperature Superconductivity: An Introduction Theory Of Superconductivity (Advanced Books Classics) The Path of No Resistance: The Story of the Revolution in Superconductivity Superconductors. Superconductivity : Easy course for understanding superconductors (What is a superconductor) Interior Designer's Portable Handbook: First-Step Rules of Thumb for the Design of Interiors (McGraw-Hill Portable Handbook) The Architect's Handbook of Professional Practice, Student Edition (Architecture Student's Handbook of Professional Practice) Mixed-Use Development Handbook (Development Handbook series) Multifamily Housing Development Handbook (Development Handbook series)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)