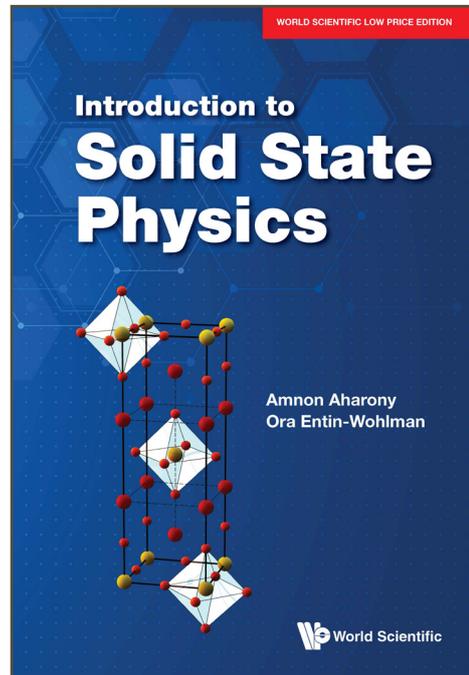


INTRODUCTION TO SOLID STATE PHYSICS

By
Amnon Aharony (*Ben Gurion University of the Negev, Israel & Tel Aviv University, Israel*) and Ora Entin-Wohlman (*Ben Gurion University of the Negev, Israel & Tel Aviv University, Israel*)



ISBN 9780000988775
Extent: 640pp, PB
Pub Date: 2020
Price: Rs. 1995

ABOUT THE BOOK

“Written by two professors emeriti with a long and distinguished career both in research and teaching, the book clearly shows the wide experience of its authors ... This is a good book, carefully prepared, full of details and appropriate for its scope. Those who will profit the most from it are the students who are obliged (or prefer) to study independently. They will appreciate the clarity of exposition and will find the numerous problems both stimulating and rewarding. What sets the book apart are undoubtedly the detailed solutions to all of the problems.”

Contemporary Physics

This is an introductory book on solid state physics. It is a translation of a Hebrew version, written for the Open University in Israel. Aimed mainly for self-study, the book contains appendices with the necessary background, explains each calculation in detail and contains many solved problems. The bulk of the book discusses the basic concepts of periodic crystals, including lattice structures, radiation scattering off crystals, crystal bonding, vibrations of crystals, and electronic properties. On the other hand, the book also presents brief reviews of advanced topics, e.g. quasicrystals, soft condensed matter, mesoscopic physics and the quantum Hall effect. There are also many specific examples drawn from modern research topics, e.g. perovskite oxides relevant for high temperature superconductivity, graphene, electrons in low dimensions and more.

Feel Books Pvt. Ltd.
4381/4 Ansari Road
Daryaganj
New Delhi 110002
Tel: +91 11 47472600

READERSHIP

Undergraduate and graduate students and researchers in physics, chemistry, materials and electrical engineering.

CONTENTS

- Introduction
- The Crystalline Structure of Solids
- Radiation Scattering Off Crystals
- Crystal Bonding
- Lattice Vibrations
- Electrons in Solids
- Selected Topics
- *Appendices:*
 - The Platonic Bodies
 - Fourier Series
 - Topics in Quantum Mechanics
 - The Continuum Limit
 - The Schrödinger Equation for Electrons in a Magnetic Field

For orders or enquiries, please contact us:



Feel Books Pvt. Ltd.

Delhi Tel: +91 11 47472600, +91 9015043442, Email: orders@feelbooks.in

Bengaluru Tel: +91 80 26762129, Email: bangalore@feelbooks.in

Mumbai Tel: +91 9820284211, Email: apandey@feelbooks.in

Chennai Mobile: +91 9003047502, Email: gsrinivasan@feelbooks.in

Kolkata Mobile: +91 9836160013, Email: dbhattacharjee@feelbooks.in

www.feelbooks.in

For any queries, please email us at marketing@feelbooks.in