

WE'VE HIGHLIGHTED YOUR TEXTBOOKS SO YOU DON'T HAVE TO

Includes virtually all the testable information chapter-by-chapter based on your book.

Whether you're preparing for your next class lecture, studying for a big exam or writing a research paper, Cram101 is your ultimate study tool.

Cram101 Textbook Outline notebooks have been designed so you get the most out of your class and study time. The outlines consist of all the terms, concepts, places, people, organizations and events that you may expect to be tested on from your textbook. The purpose of the outline format is to speed up and increase your comprehension of the material.

You'll Never Have To Highlight A Book Again!

Cram101.com can help you even more! Here's how:

Outlines & Highlights for virtually all your textbooks.

Add Unlimited Textbooks to your account at no extra cost.

Practice Exams for every chapter of your textbooks in five different test taking formats.

Integrated Note Taking to add your lecture notes to the textbook notes and maximize your study time.

Easily Access your study tool on any computer.

Use the promo code in this book to get 50% off your cram101.com membership!

Find support from Cram101 in all of these subjects:

Anthropology • Astronomy • Biology •
Business • Chemistry • Communications
• Computer Science • Economics, Finance
& Accounting • Education • English &
Language • Environmental Science • Family
& Environmental Studies • Fine Arts •
Geography • Geology • Healthcare • History
• Journalism • Literature • Mathematics •
Music • Philosophy • Physics & Engineering
• Political Science • Psychology • Religion &
Mythology • Research Methods & Statistics
• Sociology • And More Added Daily!

 **CTI**
Content Technologies, Inc.

cram101

All material prepared and written by Cram101

ISBN 9781478453086



9 781478 453086



90000

Condensed Matter in a Nutshell

Gerald D. Mahan, 1st

CONTENTS

1. Introduction	5
2. Crystal Structures	19
3. Energy Bands	41
4. Insulators	61
5. Free Electron Metals	80
6. Electron—Electron Interactions	102
7. Phonons	127
8. Boson Systems	149
9. Electron—Phonon Interactions	167
10. extrinsic Semiconductors	189
11. Transport Phenomena	209
12. Optical Properties	240
13. Magnetism	262
14. Superconductivity	287
15. Nanometer Physics	312