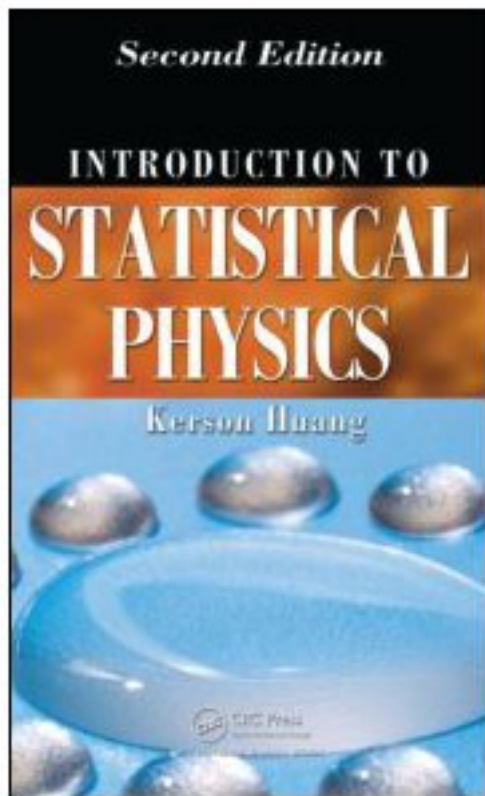


# Introduction to Statistical Physics, Second Edition



[Introduction to Statistical Physics, Second Edition\\_下载链接1\\_](#)

著者:Kerson Huang

出版者:Chapman and Hall/CRC

出版时间:2009-9-21

装帧:Hardcover

isbn:9781420079029

Written by a world-renowned theoretical physicist, Introduction to Statistical Physics, Second Edition clarifies the properties of matter collectively in terms of the physical laws governing atomic motion. This second edition expands upon the original to include many additional exercises and more pedagogically oriented discussions that fully explain the concepts and applications. The book first covers the classical ensembles of statistical mechanics and stochastic processes, including Brownian

motion, probability theory, and the Fokker--Planck and Langevin equations. To illustrate the use of statistical methods beyond the theory of matter, the author discusses entropy in information theory, Brownian motion in the stock market, and the Monte Carlo method in computer simulations. The next several chapters emphasize the difference between quantum mechanics and classical mechanics--the quantum phase. Applications covered include Fermi statistics and semiconductors and Bose statistics and Bose--Einstein condensation. The book concludes with advanced topics, focusing on the Ginsburg--Landau theory of the order parameter and the special kind of quantum order found in superfluidity and superconductivity. Assuming some background knowledge of classical and quantum physics, this textbook thoroughly familiarizes advanced undergraduate students with the different aspects of statistical physics. This updated edition continues to provide the tools needed to understand and work with random processes.

作者介绍:

目录:

[Introduction to Statistical Physics, Second Edition 下载链接1](#)

标签

物理

统计物理

统计力学7

统计力学

教材

QS

Physics

## 评论

### 一部分

-----  
不太满意，首先 typo 太多，有很多基本是稍微检查即可发现的错漏，让人怀疑作者的态度。其次结构安排，有些像是 topic 的综合简介，整个理论框架搭得勉强强，称之为 introduction 不算符合标准。最后，参考文献太少了，每章仅仅两三个，且总是自引自己那本统计物理，读者想要深入某个 topic 也无处着手。

-----  
[Introduction to Statistical Physics, Second Edition\\_下载链接1\\_](#)

## 书评

-----  
[Introduction to Statistical Physics, Second Edition\\_下载链接1\\_](#)