



## ADVANCED STATISTICAL PHYSICS()

By DAI XIAN XI

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment. Paperback. Publisher: Pub. Date:2008-02-01.

Contents : Chapter1 Fundamental Principles1.1

Introduction: The Characters of Thermodynamics and Statistical Physics and Their Relationship 1.2 Basic Thermodynamic Identities1.3 Fundamental Principles and Conclusions of Classical Statistics 1.3.1 Microscopic and Macroscopic DescriptionsStatistical Distribution Functions 1.3.2 Liouville Theorem 1.3.3 Statistical Independence1.3.4 Microscopical CanonicalCanonical and Grand CanonicalEnsembles 1.4 Boltzmann Gas 1.5 Density Matrix 1.5.1 DensityMatrix 1.5.2 Some General Properties of the Density Matrix 1.6 Liouville Theorem in Quantum Statistics 1.7 Canonical Ensemble 1.8 Grand Canonical Ensemble 1.8.1 Fundamental Expression of the Grand Canonical Ensemble 1.8.2 Derivation of the Fundamental Thermodynamic Identity 1.9 Probability Distribution and Slater Sum 1.9.1 Meaning of the Diagonal Elements of the Density Matrix1.9.2 Slater Summation 1.9.3 Example: Probability of the Harmonic Ensemble 1.10 Theory of the Reduced Density Matrix Chapter2 The Perfect Gas in Quantum Statistics 2.1 Indistinguishability Principle for Identical Particles 2.2 Bose Distribution and Fermi Distribution 2.2.1 Perfect Gases in Quantum Statistics 2.2.2 Bose Distribution 2.2.3 Fermi Distribution 2.2.4 Comparison of Three Distributions; Gibbs Paradox Again 2.3 Density of StatesChemical Potential and Equation of State 2.3.1 Density of States2.3.2 Virial Equation for Quantum Ideal...

DOWNLOAD



### Reviews

*This pdf is wonderful. It is definitely simplified but excitement from the 50 percent in the ebook. You wont sense monotony at any time of your time (that's what catalogues are for relating to should you request me).*

-- Jaqueline Kerluke

*I just started looking at this pdf. It can be rally fascinating throgh studying period of time. Its been printed in an extremely basic way and is particularly only following i finished reading through this publication where in fact altered me, change the way i really believe.*

-- Mr. Stephan McKenzie