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Nota di contenuto	DOVER BOOKS ON PHYSICS; Title Page; Copyright Page; Preface; Table of Contents; Introduction; CHAPTER I - Thermodynamic Systems; 1. The state of a system and its transformations; 2. Ideal or perfect gases.; CHAPTER II - The First Law of Thermodynamics; 3. The statement of the first law of thermodynamics.; 4. The application of the first law to systems whose states can be represented on a; 5. The application of the first law to gases.; 6. Adiabatic transformations of a gas.; CHAPTER III - The Second Law of Thermodynamics; 7. The statement of the second law of thermodynamics. 8. The Carnot cycle.9. The absolute thermodynamic temperature.; 10. Thermal engines.; CHAPTER IV - The Entropy; 11. Some properties of cycles.; 12. The entropy.; 13. Some further properties of the entropy; 14. The entropy of systems whose states can be representedon a; 15. The Clapeyron equation; 16. The Van der Waals equation.; CHAPTER V - Thermodynamic Potentials; 17. The free energy.; 18. The thermodynamic potential at constant pressure.; 19. The phase rule.; 20. Thermodynamics of the reversible electric cell.; CHAPTER VI - Gaseous Reactions; 21. Chemical equilibria in gases. 22. The Van't Hoff reaction box.23. Another proof of the equation of gaseous equilibria.; 24. Discussion of gaseous equilibria; the principle of Le Chatelier.; CHAPTER VII - The Thermodynamics of Dilute

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Sommario/riassunto	Indisputably, this is a modern classic of science. Based on a course of lectures delivered by the author at Columbia University, the text is elementary in treatment and remarkable for its clarity and organization. Although it is assumed that the reader is familiar with the fundamental facts of thermometry and calorimetry, no advanced mathematics beyond calculus is assumed.Partial contents: thermodynamic systems, the first law of thermodynamics (application, adiabatic transformations), the second law of thermodynamics (Carnot cycle, absolute thermodynamic temperature, thermal engines), the entr