

1. Record Nr.	UNINA9910459058803321
Autore	Singh N. B
Titolo	Physical chemistry . Volume II [[electronic resource] /] / N.B. Singh, Shiva Saran Das, A.K. Singh
Pubbl/distr/stampa	New Delhi, : New Age International, c2009
ISBN	1-282-45041-7 9786612450419 81-224-2940-8
Descrizione fisica	1 online resource (592 p.)
Altri autori (Persone)	DasShiva Saran SinghA. K
Soggetti	Chemistry, Physical and theoretical Chemistry Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	<p>""Cover""; ""Preface ""; ""Contents""; ""Chapter 1. Thermodynamics-I""; ""1.1 Introduction ""; ""1.2 Thermodynamics Terms and Concepts ""; ""1.3 Zeroth Law or Law of Thermal Equilibrium""; ""1.4 First Law of Thermodynamics ""; ""1.5 Joule's Law ""; ""1.6 Joule-Thomson's Effect (Adiabatic Expansion of a Real Gas)""; ""1.7 Joule-Thomson Coefficient ""; ""1.8 Some Useful Relations for Ideal Gases ""; ""1.9 Thermochemistry""; ""1.10 Heat of Reaction ""; ""1.11 Thermochemical Equations ""; ""1.12 Thermochemical Laws ""; ""1.13 Different Types of Heats of Reaction ""</p> <p>""1.14 Bond Energies or Bond Enthalpies""""Questions ""; ""Chapter 2. Thermodynamics-II""; ""2.1 Introduction ""; ""2.2 Spontaneous Process""; ""2.3 Entropy and Spontaneity Reactions ""; ""2.4 Carnot Cycle ""; ""2.5 Carnot Cycle and the Entropy ""; ""2.6 Statements of the Second Law of Thermodynamics ""; ""2.7 Combination of First and Second Laws of Thermodynamics: A Very Useful Thermodynamic Relation ""; ""2.8 Third Law of Thermodynamics ""; ""2.9 Free Energy Functions--The Need for New Functions ""; ""2.10 Prediction of Feasibility of Chemical Reactions ""</p>

""2.11 Gibbs Free Energy and Chemical Equilibrium""""2.12 Van't Hoff's Isotherm Equation in Terms of H ""; ""2.13 Clausius-Clapeyron Equation ""; ""2.14 Thermodynamic Equations of State""; ""2.15 Statistical Thermodynamics ""; ""Questions ""; ""Chapter 3. Solutions ""; ""3.1 Introduction ""; ""3.2 Ways of Expressing Concentrations of Solutions: Some Definitions ""; ""3.3 Solutions of Gases In Liquids ""; ""3.4 Solutions of Liquids in Liquids ""; ""3.5 Completely Miscible Liquids ""; ""3.6 Partially Miscible Liquid Mixtures""; ""3.7 Effect of Impurities of Critical Solution Temperature "" ""3.8 Study of Immiscible Liquids """"3.9 Thermodynamic Properties of Solution: Partial Molar Quantities ""; ""3.10 Colligative Properties of Solutions ""; ""3.11 Vapor Pressure Lowering ""; ""3.12 Osmosis and Osmotic Pressure""; ""3.13 Elevation in Boiling Point and Depression in Freezing Point of a Solution""; ""3.14 Colligative Properties of Electrolytes ""; ""Questions ""; ""Chapter 4. Phase Equilibria, Phase Diagrams and Distribution Law""; ""4.1 Gibbs Phase Rule ""; ""4.2 Thermodynamic Derivation of the Phase Rule ""; ""4.3 Phase Diagrams ""; ""4.4 One Component System "" ""4.5 Phase Diagram of Water """"4.6 Sulphur System ""; ""4.7 Helium System ""; ""4.8 Phase Diagram of Carbon Dioxide ""; ""4.9 Phase Diagram of Carbon ""; ""4.10 Phase Equilibria in Two Component Systems (Binary Systems) ""; ""4.11 Simple Binary Eutectic Phase Diagram ""; ""4.12 Phase Diagram Showing Congruent Melting Point ""; ""4.13 Phase Diagram Showing Incongruent Melting Point, or Peritectic Point ""; ""4.14 Monotectic Type Phase Diagram""; ""4.15 Phase-Transformations in Solids ""; ""4.16 Ubbelohde's Classification ""; ""4.17 Distribution Law "" ""4.18 Determination of Equilibrium Constant ""
