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1.8.1.3. Electrochemical potential of the electrons in the metal and the Fermi energy
1.8.1.4. Energy distribution of the free electrons; 1.8.1.5.

Contribution of the free electrons to the internal energy of a metal;

1.8.2. The metallic bond and band theory; 1.8.2.1. Origin of energy

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of energy states and of free electrons at absolute zero; 1.9. Molar

specific heat capacities of crystalline solids

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capacity at constant volume
1.9.1.1. Case of a unique vibration in

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distribution; 1.9.2. Specific heat capacity of an atomic solid at constant

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materials; 1.9.3. Specific heat capacity of a molecular or ionic solid at

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coefficients

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tensor; 1.10.1.3. Cubic expansion coefficient (or coefficient of relative

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solid solution; 2.1.2.1. Octahedral sites of the cubic centered faces

lattice

2.1.2.2. Tetrahedral sites of the cubic centered faces lattice

Sommario/riassunto

The book offers advanced students, in 7 volumes, successively characterization tools phases, the study of all types of phase, liquid, gas and solid, pure or multi-component, process engineering, chemical and electrochemical equilibria, the properties of surfaces and phases of small sizes. Macroscopic and microscopic models are in turn covered with a constant correlation between the two scales. Particular attention was given to the rigor of mathematical developments. Besides some very specialized books, the vast majority of existing works are intended for beginners and therefore limited in s
