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ReferencesFurther reading; Chapter 4. Structure of intermetallic compounds and phases; 1. Introduction; 2. Chemical composition of the intermetallic phase and its compositional formula; 3. Crystal structure of the intermetallic phase and its representation; 4. Relationships between structures and structure ""families""; 5. Elements of systematic description of structure types. General remarks and references; 6. Description of a few selected structural types; 7. On some regularities in the intermetallic compound formation and structures
8. Semi-empirical approaches to the prediction of (intermetallic) compound formationAppendix 1. Gazetteer, in alphabetic order, of intermetallic phases cited in this chapter; References; Appendix to chapter 4. The structure of quasicrystals; 1. Introduction; 2. Description of quasiperiodic structures; 3. The structure of quasicrystals and approximants; References; Further reading; Chapter 5. Metallurgical thermodynamics; 1. Introduction; 2. Metallurgical thermochemistry; 3. Phase equilibrium in a one-component system; 4. Chemical reaction equilibrium; 5. Ellingham diagrams
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Sommario/riassunto

This is the fourth edition of a work which first appeared in 1965. The first edition had approximately one thousand pages in a single volume. This latest volume has almost three thousand pages in 3 volumes which is a fair measure of the pace at which the discipline of physical metallurgy has grown in the intervening 30 years. Almost all the topics previously treated are still in evidence in this version which is approximately 50% bigger than the previous edition. All the chapters have been either totally rewritten by new authors or thoroughly revised and expanded, either by the third-edition