1. Record Nr. UNINA9910784630803321

Titolo	Physical metallurgy [[electronic resource] /] / edited by Robert W. Cahn and Peter Haasen
Pubbl/distr/stampa	Amsterdam, : North-Holland Pub. Co. New York, : Wiley, 1996
ISBN	1-281-31162-6 9786611311629 0-08-053894-0
Edizione	[4th ed.]
Descrizione fisica	1 online resource (2889 p.)
Altri autori (Persone)	CahnR. W <1924-2007.> (Robert W.) HaasenP (Peter)
Disciplina	669.9 669/.9 20
Soggetti	Physical metallurgy Metallurgy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographies.
Nota di contenuto	Front Cover; List of contributors; Physical Metallurgy; Copyright Page; Synopsis of contents; Preface to the fourth edition; Preface to the third edition; Preface to the first and second editions; Contents; Chapter 1. Crystal structure of the metallic elements; 1. Introduction; 2. Factors governing a crystal structure; 3. Crystal structure of metallic elements; References; Further reading; Chapter 2. Electron theory of metals; 1. Introduction; 2. Band formation; 3. Simple-metal bands; 4. Transition-metal bands; 5. Bulk properties; 6. Structural stability; 7. Heat of formation 8. Band theory of magnetismReferences; Further reading; Chapter 3. Structure and stability of alloys; 1. Solid solubility; 2. Terminology (types of solid solutions); 3. Energy of solid solutions and phase stability considerations; 4. Factors governing solid solubility (Hume-Rothery rules for primary solid solutions); 5. The meaning of ""electron concentration""; 6. Termination of primary solid solubility; 7. The atomic size in solid solutions; 8. Intermediate phases with wide solid solubility; 9. Lattice spacings in solid solutions; 10. Defect structures;

11. Order in solid solutions

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

6. The thermodynamic properties of solutions7. The thermodynamic origin of phase diagrams; 8. Reaction equilibrium involving solutions and the Gibbs phase rule; 9. The thermodynamics of surfaces and interfaces; 10. The measurement of thermodynamic activity; Bibliography; Chapter 6. Phase diagrams; 1. Introduction; 2. Binary phase diagrams; 3. Ternary phase diagrams; 4. Multicomponent phase diagrams; 5. Thermodynamic calculation of ternary and multicomponent phase diagrams; 6. Phase diagrams with potentials as axes; 7. Experimental techniques of measuring phase diagrams; 8. Bibliography

9. Acknowledgements

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

2. Record Nr. UNINA9910974843703321

Autore	Gibson Dirk C
Titolo	Commercial space tourism : impediments to industrial development and strategic communication solutions / / authored by Dirk C. Gibson
Pubbl/distr/stampa	[Oak Park, Ill.], : Bentham eBooks, [2012]
ISBN	9781608052394 1608052397
Edizione	[1st ed.]
Descrizione fisica	1 online resource (349 p.)
Disciplina	303.48/2
Soggetti	Space tourism
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Cover; TItle; EUL; Dedication; Contents; Foreword; Preface; Acknowledgement; Unit 1; Chapter 01; Chapter 02; Chapter 03; Unit 2; Chapter 04; Chapter 05; Unit 3; Chapter 06; Chapter 07; Chapter 08; Unit 4; Chapter 09; Chapter 10; Chapter 11; Chatper 12; Bibliography; Author Index; Subject Index
Sommario/riassunto	This e-book is a useful guide for readers who are personally and/or professionally interested in commercial space tourism and related commercial space ventures, and those interested in astronautics, space development and similar public policy issues in general.