

1. Record Nr.	UNINA9910402358603321
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Titolo	Principles of classical thermodynamics : applied to materials science // Didier de Fontaine (University of California, Berkeley, USA)
Pubbl/distr/stampa	Singapore ; ; Hackensack, NJ : , : World Scientific Publishing Co. Pte. Ltd., , [2019] ©2019
ISBN	9789813222687
Descrizione fisica	XIV, 375 p. : ill. ; 24 cm
Disciplina	536/.7
Locazione	FINBC
Collocazione	13 SC I P 63
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Basic thermodynamics: Thermo systems; Fundamental laws (caratheodory treatment); Thermo equilibria; Ideal cases; One-component equilibrium; Solutions -- Derived topics: Introduction to statistical mechanics; Phase diagrams; Glass transformation; Chemical reactions; Point defect equilibrium; Interfaces; Phase stability; Spinodal concept; Nucleation and growth; Summary and conclusion.
Sommario/riassunto	"The aim of this book is to present Classical Thermodynamics in a unified way, from the most fundamental principles to non-uniform systems, thereby requiring the introduction of coarse graining methods, leading for instance to phase field methods. Solutions thermodynamics and temperature-concentration phase diagrams are covered, plus also a brief introduction to statistical thermodynamics and topological disorder. The Landau theory is included along with a general treatment of multicomponent instabilities in various types of thermodynamic applications, including phase separation and order-disorder transitions. Nucleation theory and spinodal decomposition are presented as extreme cases of a single approach involving the all-important role of fluctuations. In this way, it is hoped that this coverage will reconcile in a unified manner techniques generally presented separately in physics and materials texts"--