1.	Record Nr. Titolo	UNINA9910808988603321 Solid phase transformations II / / edited by J. Cermak and I. Stloukal
	Pubbl/distr/stampa	Stafa-Zurich, Switzerland:,: Trans Tech Publications,, [2009] ©2009
	ISBN	3-03813-284-5
	Descrizione fisica	1 online resource (225 p.)
	Collana	Diffusion and defect data. Pt. B. Solid state phenomena, , 1012-0394 ; ; volume 150
	Altri autori (Persone)	CermakJ Stloukall (Ivo)
	Disciplina	530.414
	Soggetti	Solid state physics Phase transformations (Statistical physics) Solid state chemistry
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	"Special topic volume, invited papers only."
	Nota di bibliografia	Includes bibliographical references and indexes.
	Nota di contenuto	Solid Phase Transformations II; Preface; Table of Contents; Application of Ab Initio Electronic Structure Calculations in Construction of Phase Diagrams of Metallic Systems with Complex Phases; Investigation of Phase Transformation in Thin Film Using Finite Element Method; Statistical Thermodynamics and Kinetics of Long-Range Order in Metal-Doped Graphene; Statistical Thermodynamics and Surface Phase Transitions of Interacting Particles Adsorbed on One-Dimensional Channels Arranged in a Triangular Cross-Sectional Structure Order-Disorder Transitions and Thermodynamic Properties of M-Type HexaferritesStructural Stability and Phase Transitions in f-Electron Based Systems; Structural and Magnetic Transitions in Rapidly Solidified Heusler Alloys Ribbons; Displacive Phase Transformations; Pressure-Temperature Phase Relations in Complex Hydrides; Recent Developments in Co-Base Alloys; Keywords Index; Authors Index
	Sommario/riassunto	This topical volume includes ten invited papers that cover selected areas of the field of solid phase transformations. The first two contributions represent a burgeoning branch; that of the computer simulation of physical phenomena. The following three articles deal with the thermodynamics of phase transformations as a basic theory

for describing the phenomenology of phase changes in matter. The next paper describes the interconnections between structural stability and the electronic structure of phases. Two further articles are devoted to displacive transformations; a field where there are ma