

1. Record Nr.	UNINA9910787024803321
Titolo	Recent progress in diffusion thermodynamics and kinetics in intermetallic compounds : special topic volume with invited peer reviewed papers only // edited by R. Kozubski
Pubbl/distr/stampa	Pfaffikon, Switzerland : , : Trans Tech Publications Ltd, , 2014 Enfield, New Hampshire : , : TTP, , [date of distribution not identified] ©2014
ISBN	3-03826-649-3
Descrizione fisica	1 online resource (226 p.)
Collana	Diffusion Foundations, , 2296-3642 ; ; Volume 2
Disciplina	620.16
Soggetti	Intermetallic compounds
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 index.
Nota di contenuto	Recent Progress in Diffusion Thermodynamics and Kinetics in Intermetallic Compounds; Preface; Table of Contents; Self-Diffusion, Solute-Diffusion and Interdiffusion in Binary Intermetallics; Atomic Migration Studies with X-Ray Photon Correlation Spectroscopy; Impurity Diffusion in Highly-Ordered Intermetallic Compounds Studied by Nuclear Quadrupole Interactions; Anomalous Kinetics and Regimes of Growth of Intermetallic Phases during Solid State Reactions in Nanosystems Influence of Limited Efficiency and Competition of Vacancy Sinks/Sources on the Diffusion-Controlled Intermediate Phase Growth Theoretical Study of the Heat of Transport in a Liquid Ni ₅₀ Al ₅₀ Alloy: Green-Kubo Approach; "Order-Order" Kinetics in Triple-Defect B2-Ordered Binary Intermetallics: Kinetic Monte Carlo Simulation; Keywords Index; Authors Index
Sommario/riassunto	The fascinating development of materials science which nowadays definitely involves the previously side-lined basic research within physics and chemistry has led to a number of innovative technologies of new materials. Despite many hopes and even successes in replacing traditional metallic materials by, for example, polymers or composites, the former materials are not only still widely used but are also making a 'come back'. As an example, intermetallic phases are enjoying an ever

increasing interest as either functional or high-temperature structural materials and are prominent in this develo
