1. Record Nr. UNINA9910462828003321

Titolo	Recent advances in mass transport in materials : special topic volume with invited peer reviewed papers only / / edited by Andreas Ochsner and Graeme Murch
Pubbl/distr/stampa	Durnten-Zurich, Switzerland : , : Trans Tech, , [2012] ©2012
ISBN	3-03813-702-2
Descrizione fisica	1 online resource (215 p.)
Collana	Defect and diffusion forum ; ; volume 322
Altri autori (Persone)	OchsnerAndreas MurchGraeme
Disciplina	530.475
Soggetti	Diffusion Materials science Transport theory Electronic books.
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	Recent Advances in Mass Transport in Materials; Preface; Table of Contents; The Phase Stability in the Fe-B Binary System: Comparison between the Interstitial and Substitutional Models; Analytical Solutions of the Boltzmann Transformation Equation; Interface Controlled Diffusional Creep of Cu + 2.8 at.% Co Solid Solution; Reactive Diffusion at the Contact of a Solid Phase with the Solder Melt; Determination of Intrinsic Diffusion Coefficients in Binary Alloys with Variable Molar Volume by the M-M Method The Coke and Iron Ore Materials Kinetic Characteristics and Quantitative Indicators of Blast Furnace Process Molybdenum Disilicide - Diffusion, Defects, Diffusion Correlation, and Creep; Original Methods for Diffusion Measurements in Polycrystalline Thin Films; Influence of Deformation on Precipitation Kinetics in Mg-Tb Alloy; Duplex Stainless Steels: A Dozen of Significant Phase Transformations; Hydrogen and Electric Field Effect on Iron Impurities Removal from Molten Zirconium; TiAl3 Formation in the Titanium-Aluminum Diffusion Couple Heat and Mass Transfer at High Speed Filtration in Porous Media and

	Packed BedsKeywords Index; Authors Index
Sommario/riassunto	The present topical volume presents a representative cross-section of some recent advances made in the area of diffusion. The range of topics covered is very large, and, this reflects the enormous breadth of the topic of diffusion. The areas covered include diffusion in intermetallics, phenomenological diffusion theory, diffusional creep, kinetics of steel-making, diffusion in thin films, precipitation, diffusional phase transformations, atomistic diffusion simulations, epitaxial growth and diffusion in porous media. Review from Book News Inc.: In 13 invited and peer-reviewed papers, scientist