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Titolo	Diffusion in solids and liquids : heat transfer - microstructure & properties : 2nd International Conference on Diffusion in Solids and Liquids, Mass Transfer - Heat Transfer - Microstructure & Properties, DSL-2006, 26-28 July 2006, University of Aveiro, Portugal / / edited by Andreas Ochsner, Jose Gracio
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Altri autori (Persone)	OchsnerAndreas GracioJose
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Nota di contenuto	Diffusion in Solids and Liquids II, DSL-2006 II; Table of Contents; Stress Distributions in an Annular Disk Possessing Stress Induced Material Anisotropy; Numerical Analysis of Triaxial Residual Stresses in Quenched 316H Stainless Steel; Texture Evolution during High Temperature Plane Strain Compression of High Silicon Steels; Fracture Toughness of Iron Boride Layers Obtained by Paste Boriding Process; Self-Affine Patterns of Boride Layers; Modeling and Simulation of Resin Filling and Cure Processes in Molds Partially Filled with Porous Media On the Thermal Conductivity of Adhesively Bonded and Sintered Hollow Sphere Structures (HSS)Influence of the Morphology of Joining on the Heat Transfer Properties of Periodic Metal Hollow Sphere Structures; Calculation of the Effective Thermal Conductivity in Composites Using Finite Element and Monte Carlo Methods; A Thermodynamical Model for Analysis of Isothermal Phase Transformations under High Pressure; Comparison between the Thermodynamical Behaviour of PdTe2 and PtTe2, while Subjected Isothermally to High Pressure Fracture Toughness and Crack Deflection in Porous Multilayered Ceramics: Application to NiO-YSZFinite Element Analysis of

Temperature and Density Distributions in Selective Laser Sintering Process; Comparison between Self-Consistent and Intermediate Approaches for the Simulation of Large Deformation Polycrystal Viscoplasticity; Evaluation of Transmission Conditions for a Thin Heat-Resistant Inhomogeneous Interphase in Dissimilar Material; Finite Element Verification of Transmission Conditions for 2D Heat Conduction Problems
Flux Evaluation in Anisotropic Heat Conduction Using the Modified Local Green's Function Method (MLGFM): Comparative StudiesModeling the Longitudinal Temperature Evolution of a Chirped Fiber Bragg Grating Submitted to Temperature Gradients; The Effective Conductivity of 2D Porous Materials with Temperature Dependent Material Properties; Two Different Approaches for the Effective Conductivity Investigation of 2D Porous Materials with Temperature Dependent Material Properties; Design of an Induction Glass Melting Furnace by Means of Mathematical Modelling Using the Finite Element Method Estimation of the Heat Flux Through Furnace Side Walls Protected with Water Cooled Cooling DevicesHeat Conduction of 2D Composite Materials with Symmetric Inclusions: a Model and Reduction to a Vector-Matrix Problem; Hele-Shaw Model for Melting/Freezing with Two Dendrits; Intermediates in Ring-Disc Electrode Processes; Vibration Analysis of a Ni-Ti Shape Memory Alloy Rod; SPH as an Inverse Numerical Tool for the Prediction of Diffusive Properties in Porous Media; Evaluation of Thermal and Mechanical Filler Gas Influence on Honeycomb Structures Behavior
Thermal Post-Impact Behavior of Closed-Cell Cellular Structures with Fillers - Part I

Sommario/riassunto

The goal of this special collection was to provide a unique opportunity to gather together the latest results as well as to review the current issues most relevant to diffusion research. The 29 peer-reviewed papers focus on heat transfer and microstructure & properties. The collection also includes papers related to: Phase Change: Multiscales and Strong Coupling, Nanostructures and Materials. The whole provides a neat guide to this specialized subject.