

## Table of Contents

<b>Free Surface Relaxation and Two-Beam TEM Imaging of Straight Dislocations in Thin Foils</b> R. Bonnet, S.B. Youssef, A. Boussaïd, C.H. Belgacem and M. Fnaiech	1
<b>Free Volume Diffusion and Optimisation of Soft Magnetic Properties in Amorphous Alloys Based on Iron</b> G. Haneczok and J. Rasek	13
<b>Super-High Concentrations of Vacancies in Regions of High Concentration of Point Defects and Composition of Vacancy-Oxygen Complexes in These Regions in Pd, Ta, W and Pt Polycrystals</b> S.M. Klotsman, V.N. Kaigorodov, A.V. Ermakov, V.K. Rudenko and N.I. Timofeev	27
<b>Atomic, Electron and Phonon Aspects of the Edge Dislocation in Iron</b> H.B. Liu and J.A. Ascencio	37
<b>Calculation of Tracer and Chemical Diffusion Coefficients in the Intermetallic Compound <math>\beta</math>-AgMg</b> I.V. Belova and G.E. Murch	45
<b>Investigation of Hydride Formation in Crystalline and Amorphous Metallic Alloys Using Electrochemical Hydrogen Permeation Tests</b> D.S. dos Santos	53
<b>Vacancy-Formation Thermodynamics in Aluminium and Nickel: a Computational Study</b> M. De Koning, S. Ramos de Debiaggi and A.M. Monti	59
<b>Hydrogen Diffusion in Laves-Phase Compounds</b> A.V. Skripov	75
<b>Chemical and Intrinsic Hydrogen Diffusion in <math>Pd_{0.75}Ag_{0.25}</math>-H Alloys: NMR Aspects</b> K. Tompa, P. Bánki and M. Bokor	93
<b>A Discrete Dislocation Plasticity Model of Creep in Polycrystalline Thin Films</b> A. Hartmaier, M.J. Buehler and H. Gao	107
<b>A Simple Iterative Method for Analysing Experimental Tracer Diffusivities in Concentrated Binary Alloys</b> I.V. Belova and G.E. Murch	127
<b>Abstracts</b>	1