

Table of Contents

Introduction: Early Results of Diffusion Investigations in Metals	
G. Neumann and C. Tuijn	1
Introduction: Experimental Techniques	
G. Neumann and C. Tuijn	6
Diffusion Mechanisms: The Vacancy Diffusion Coefficient	
G. Neumann and C. Tuijn	19
Diffusion Mechanisms: Two-Defect Models	
G. Neumann and C. Tuijn	21
Diffusion Mechanisms: One-defect models	
G. Neumann and C. Tuijn	26
Self-Diffusion: Self-Diffusion in FCC Metals	
G. Neumann and C. Tuijn	31
Self-Diffusion: Self-Diffusion in BCC Metals	
G. Neumann and C. Tuijn	40
Self-Diffusion: Point Defect Investigations	
G. Neumann and C. Tuijn	51
Self-Diffusion: Comparison of the results of diffusion and point defect investigations	
G. Neumann and C. Tuijn	55
Self-Diffusion: Concluding Remarks on Self-Diffusion	
G. Neumann and C. Tuijn	60
Impurity Diffusion: Empirical Correlations	
G. Neumann and C. Tuijn	61
Impurity Diffusion: Impurity Diffusion in Noble Metals	
G. Neumann and C. Tuijn	66
Impurity Diffusion: Impurity Diffusion in the 3d Metals of Group VIII	
G. Neumann and C. Tuijn	111
Impurity Diffusion: Impurity Diffusion in Hexagonal Metals	
G. Neumann and C. Tuijn	121
Impurity Diffusion: Impurity Diffusion in Aluminum	
G. Neumann and C. Tuijn	129
Impurity Diffusion: Impurity Diffusion in Lead	
G. Neumann and C. Tuijn	138
Impurity Diffusion: Impurity Diffusion in Refractory BCC Metals	
G. Neumann and C. Tuijn	156
Impurity Diffusion: Impurity Diffusion in the BCC β-Phase of Group IV Metals	
G. Neumann and C. Tuijn	167
Impurity Diffusion: Concluding Remarks on Impurity Diffusion	
G. Neumann and C. Tuijn	177