

# Table of Contents

<b>The Characterization of Defects in Silicon Carbide Crystals by X-Ray Topography in the Back-Reflection Geometry</b> W.M. Vetter	1
<b>Progress in Wide Bandgap Ferromagnetic Semiconductors and Semiconducting Oxides</b> S.J. Pearton, C.R. Abernathy, G.T. Thaler, R.M. Frazier, Y.H. Heo, M. Ivill, D.P. Norton and Y.D. Park	17
<b>Calculating the Properties of Defects in Semiconductors at Finite Temperatures</b> S.K. Streicher and M. Sanati	47
<b>Role of Cation Vacancy-Related Defects in Self-Assembling of CdSe Quantum Dots</b> L.V. Borkovska, R. Beyer, M. Hoffmann, A. Holzhey, N. Korsunska, Y.G. Sadofyev and J. Weber	55
<b>Radiation-Induced Defect Formation in Ternary Ge-As-S Vitreous Semiconductors</b> R.Y. Golovchak and O.I. Shpotyuk	67
<b>First Principles Calculations of Hydrogen Aggregation in Silicon</b> N. Martsinovich, A.L. Rosa, M.I. Heggie and P.R. Briddon	81
<b>Anisotropy of Strain Relaxation in III-V Semiconductor Heterostructures</b> O. Yastrubchak, T. Wosiński, J.Z. Domagała and E. Łusakowska	93
<b>On the Photo-Ionization Cross-Section of DX Centers</b> E. Płaczek-Popko	101
<b>Imaging and Characterizing Nanoscale Fluctuations in the Distribution of Dopant Atoms by Scanning Tunneling Microscopy</b> P. Ebert	111
<b>Investigation and Identification of Transition Metals in p-Type Boron-Doped Silicon by Non-Invasive Techniques</b> O. Palais and P. Hidalgo	125
<b>Classification of Defects on Semiconductor Wafers Using Priority Rules</b> N.G. Shankar, Z.W. Zhong and N. Ravi	135
<b>Grown-In Lattice Defects and Diffusion in Czochralski-Grown Germanium</b> J. Vanhellemont, O. De Gryse, S. Hens, P. Vanmeerbeek, D. Poelman, P. Clauws, E. Simoen, C. Claeys, I. Romandic, A. Theuwis, G. Raskin, H. Vercammen and P. Mijlemans	149
<b>Mechanism of Formation and Physical Classification of the Grown-In Microdefects in Semiconductor Silicon</b> V.I. Talanin and I.E. Talanin	177
<b>Nitrogen in Silicon</b> D.R. Yang and X. Yu	199
<b>Modelling of Staebler-Wronski Effect in Hydrogenated Amorphous Silicon under Moderate and Intense Illumination</b> A.F. Meftah, A.M. Meftah and A. Merazga	221
<b>Defect Engineering in Impurity-Free Disordered (Al)GaAs for Optoelectronic Devices Application</b> P.N.K. Deenapanray	233
<b>Abstracts</b>	1