

Contents

Preface	XI
Chapter 1 Introductory Chapter: Electron Crystallography <i>by Devinder Singh</i>	1
Chapter 2 Transmission Electron Microscopy of Nanomaterials <i>by Mohammad Jafari Eskandari, Reza Gostariani and Mohsen Asadi Asadabad</i>	9
Chapter 3 Empires: The Nonlocal Properties of Quasicrystals <i>by Fang Fang, Sinziana Paduroiu, Dugan Hammock and Klee Irwin</i>	27
Chapter 4 Structure Analysis of Quasicrystal Approximants by Rotation Electron Diffraction (RED) <i>by Devinder Singh and Sven Hovmöller</i>	39
Chapter 5 Micro-/Nano-Structuring in Stainless Steels by Metal Forming and Materials Processing <i>by Tatsuhiko Aizawa, Tomomi Shiratori and Takafumi Komatsu</i>	55
Chapter 6 Strongly Fluorescent Heterocyclic Molecule: Crystallography, 3D Hydrogen-Bonded, Fluorescence Study and QTAIM/TD-DFT/ MESP Theoretical Analysis <i>by Ouahida Zeghouan, Seifeddine Sellami and Mohamed AbdEsselem Dems</i>	77
Chapter 7 Study on Dislocation-Dopant Ions Interaction during Plastic Deformation by Combination Method of Strain-Rate Cycling Tests and Application of Ultrasonic Oscillations <i>by Yohichi Kohzuki</i>	89