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1.8 Size-Dependent Properties, Quantum Size Effects and Thermodynamics of NanomaterialsAppendix; Use of Electrochemical Measurements for the Determination of the Thermodynamic Functions of Semiconductors; References; Chapter 2 Point Defects in Semiconductors; 2.1 Introduction; 2.2 Point Defects in Ionic Solids: Modelling the Electrical Conductivity of Ionic Solids by Point Defects-Mediated Charge Transfer; 2.3 Point Defects and Impurities in Elemental Semiconductors; 2.3.1 Introduction
2.3.2 Vacancies and Self-Interstitials in Semiconductors with the Diamond Structure: an Attempt at a Critical Discussion of Their Thermodynamic and Transport Properties2.3.3 Effect of Defect-Defect Interactions on Diffusivity: Trap-and-Pairing Limited Diffusion Processes; 2.3.4 Light Impurities in Group IV Semiconductors: Hydrogen, Carbon, Nitrogen, Oxygen and Their Reactivity; 2.4 Defects and Non-Stoichiometry in Compound Semiconductors; 2.4.1 Structural and Thermodynamic Properties; 2.4.2 Defect Identification in Compound Semiconductors; 2.4.3 Non-Stoichiometry in Compound Semiconductors
References