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Handbook on Physical Properties of Semiconductors

 Presents accurate, reliable and up-to-date information on the physical properties of group IV elemental semiconductors (Vol. 1), III-V compound semiconductors (Vol. 2) and II-VI semiconductors (Vol. 3)

The aim of this 3-volume reference is to present accurate, reliable and up-to-date information on the physical properties of group IV elemental semiconductors (Vol. 1), III-V compound semiconductors (Vol. 2) and II-VI semiconductors (Vol. 3). The data on the physical properties of each material are organized in the same way throughout these volumes to facilitate searching for information. The physical properties considered in these volumes can be classified into 12 groups: structural properties;

-thermal properties;

-elastic properties;

-phonons and lattice vibronic properties;

-collective effects and related properties;

-energy-band structure: energy-band gaps;

-energy-band structure: electron and hole effective mass;

-electronic deformation potential;

-electron affinity and Schottky barrier height;

-optical properties;

-elastooptic, electrooptic and nonlinear optical properties; and,

-carrier transport properties.

An extensive bibliography is included for those who wish to find additional information.