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Sommario/riassunto

The main purpose of this book is to provide a comprehensive treatment of the materials aspects of group-IV, III-V and II-VI semiconductor alloys used in various electronic and optoelectronic devices. The topics covered in this book include the structural, thermal, mechanical, lattice vibronic, electronic, optical and carrier transport properties of such semiconductor alloys. The book reviews not only commonly known alloys (SiGe, AlGaAs, GaInPAs, and ZnCdTe) but also new alloys, such as dilute-carbon alloys (CSiGe, CSiSn, etc.), III-N alloys, dilute-nitride alloys (GaNAs and GaInNAs) and Mg- or
