Record Nr. UNINA9910480849203321 Semiconductors [[electronic resource]]: Group IV Elements and III-V **Titolo** Compounds / / edited by Otfried Madelung Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, . 1991 **ISBN** 3-642-45681-2 Edizione [1st ed. 1991.] 1 online resource (VII, 164 p.) Descrizione fisica Collana Data in Science and Technology, , 0941-2751 Disciplina 537.6/22 Soggetti **Physics** Optical materials Electronic materials Physics, general Optical and Electronic Materials Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references at the end of each chapters. Nota di contenuto Contents: Part A: Introduction: General remarks -- Physical quantities tabulated in this volume -- Part B: Physical data: Elements of the IVth group and the IV-IV compounds: Diamond (C) -- Silicon (Si) --Germanium (Ge) -- Grey tin (Sn) -- Silicon carbide (SiC) -- Silicon germanium alloys (SixGe1-x) -- III-V compounds: Boron nitride (BN) --Boron phosphide (BP) -- Boron arsenide (BAs) -- Aluminium nitride (AIN) -- Aluminium phosphide (AIP) -- Aluminium arsenide (AIAs) --Aluminium antimonide (AISb) -- Gallium nitride (GaN) -- Gallium phosphide (GaP) -- Gallium arsenide (GaAs) -- Gallium antimonide (GaSb) -- Indium nitride (InN) -- Indium phosphide (InP) -- Indium arsenide (InAs) -- Indium antimonide (InSb) -- Ternary and quaterny alloys between III-V compounds -- Appendix: Contents of the volumes of the New Series of Landolt-Börnstein dealing with group IV and group III-V semiconductors. Sommario/riassunto The frequent use of well known critical data handbooks like Beilstein, Gmelin and Landolt- Bornstein is impeded by the fact that merely larger libraries - often far away from the scientist's working place - can

afford such precious collections. To satisfy an urgent need of many

scientists for having at their working place a comprehensive, high quality, but cheap collection of at least the basic data oftheirfield of interest the series "Data in Science and Technology"is started now. This first volume presents the most important data on two groups of semiconductors, the elements of the IVth group of the periodic system and the III-V compounds. All data were compiled from information on about 2500 pages in various volumes of the New Series of Landolt-Bornstein. For each critically chosen data set and each figure the original literature is cited. In addition, tables of content refer to the handbooks the data were drawn from. Thus the presentation of data in this volume is of the same high quality standard as in the original evaluated data collections. We hope to meet the needs of the physical community with the volumes of the series "Data in Science and Technology", forming bridges between the laboratory and additional information sources in the libraries.