Record Nr. UNINA9910144731903321 Autore Kolobov Alexander V Titolo Photo-induced metastability in amorphous semiconductors [[electronic resource] /] / [edited by] Alexander V. Kolobov; with a foreword of Kazunobu Tanaka Weinheim, : [Cambridge], : Wiley-VCH, c2003 Pubbl/distr/stampa **ISBN** 1-280-72298-3 9786610722983 3-527-60254-2 3-527-60866-4 Descrizione fisica 1 online resource (438 p.) Altri autori (Persone) KolobovAlexander V Disciplina 541.22 621.38152 Soggetti Amorphous semiconductors Chemical structure Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di contenuto Photo-Induced Metastability in Amorphous Semiconductors; Preface: Introduction; Contents; List of Contributors; 1 Structure, Defects and Electronic Properties of Amorphous Semiconductors; 1.1 Structural States of Solids; 1.1.1 Ordered State; 1.1.2 Disordered (Non-Crystalline) State; 1.2 Atomic Scale Ordering in Crystalline and Non-Crystalline Solids; 1.2.1 Long-Range Order; 1.2.2 Short-Range Order; 1.2.3 Medium-Range Order; 1.3 Fundamental Problems of Structure of Non-Crystalline Semiconductors; 1.3.1 Tetrahedrally Bonded **Amorphous Semiconductors** 1.3.2 Amorphous Non-Tetrahedrally Bonded Semiconductors 1.4 Defects in Non-Crystalline Solids; 1.4.1 Local Defects; 1.4.2 The Diffuse or Collective Defects (Extended Defects); 1.4.3 Chemical Defects: 1.4.4 Electronic-Structural Defects: 1.4.5 Macrodefects: 1.5

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Sommario/riassunto

A review summarising the current state of research in the field, bridging the gaps in the existing literature. All the chapters are written by world leaders in research and development and guide readers through the details of photo-induced metastability and the results of the latest experiments and simulations not found in standard monographs on this topic. A useful reference not only for graduates but also for scientific and industrial researchers. With a foreword of Kazunobu Tanaka.