Record Nr. UNINA9910876721403321 Complex metallic alloys: fundamentals and applications / / edited by **Titolo** Jean-Marie Dubois and Esther Belin-Ferre Pubbl/distr/stampa Weinheim [Germany], : Wiley-VCH, 2011 **ISBN** 1-282-94454-1 9786612944543 3-527-63304-9 3-527-63271-9 3-527-63272-7 Edizione [4th ed.] Descrizione fisica 1 online resource (435 p.) Altri autori (Persone) DuboisJean-Marie Belin-FerreEsther Disciplina 546.31 Soggetti Alloys Crystals Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Complex Metallic Alloys: Fundamentals and Applications; Foreword; Contents; Preface; List of Contributors; 1 Introduction to the Science of Complex Metallic Alloys; 2 Properties of CMAs: Theory and Experiments; 3 Anisotropic Physical Properties of Complex Metallic Alloys; 4 Surface Science of Complex Metallic Alloys; 5 Metallurgy of Complex Metallic Alloys; 6 Surface Chemistry of CMAs; 7 Mechanical Engineering Properties of CMAs; 8 CMA's as Magnetocaloric Materials; 9 Recent Progress in the Development of Thermoelectric Materials with Complex Crystal Structures 10 Complex Metallic Phases in CatalysisIndex Covering fundamental research as well as real-world applications, this Sommario/riassunto first book on CMAs at an introductory level treats everything from atomistic details to surface processing. Comprehensive, self-contained chapters provide readers with the latest knowledge on the most salient features of the topic, selected in terms of their relevance to potential technological applications. Edited by one of the most distinguished

authorities on quasicrystals and this most important of their

subclasses, the contributions elucidate aspects of CMAs from a particular viewpoint: physical and chemical character