Record Nr. UNINA9910783111503321 Autore Mandelkern Leo Titolo Crystallization of polymers . Volume 1 Equilibrium concepts / / Leo Mandelkern [[electronic resource]] Cambridge:,: Cambridge University Press,, 2002 Pubbl/distr/stampa 1-107-13462-5 **ISBN** 0-521-02013-1 1-280-42012-X 9786610420124 1-139-14842-7 0-511-17829-8 0-511-05473-4 0-511-30552-4 0-511-54131-7 0-511-06952-9 Edizione [Second edition.] Descrizione fisica 1 online resource (xiii, 433 pages): digital, PDF file(s) Disciplina 547/.84 Soggetti **Polymers** Crystallization Crystalline polymers Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Title from publisher's bibliographic system (viewed on 05 Oct 2015). Note generali Includes bibliographical references and indexes. Nota di bibliografia Nota di contenuto Cover; Half-title; Title; Copyright; Dedication; Contents; Preface to second edition; Preface to first edition; 1 Introduction; 2 Fusion of homopolymers: 3 Polymer-diluent mixtures: 4 Polymer-polymer mixtures: 5 Fusion of copolymers: 6 Thermodynamic quantities: 7 Fusion of cross-linked polymers; 8 Oriented crystallization and contractility; Author index; Subject index Sommario/riassunto First published in 2002, from an original 1964 edition, in the Crystallization of Polymers, 2nd edition Leo Mandelkern provides a self-contained treatment of polymer crystallization. All classes of

macromolecules are included and the approach is through the basic

disciplines of chemistry and physics. The book discusses the

thermodynamics and physical properties that accompany the morphological and structural changes that occur when a collection of molecules of very high molecular weight are transformed from one state to another. Volume 1 is a presentation of the equilibrium concepts that serve as a basis for the subsequent volumes. In this volume the author shows that knowledge of the equilibrium requirements is vital to understanding all aspects of the polymer crystallization process, and the final state that eventually evolves. This book will be an invaluable reference work for all chemists, physicists and materials scientists who work in the area of polymer crystallization.