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4 . Theoretical relationships4.1. Structure factor; 4.2. The Ewald sphere; 4.3. Pair distribution; 4.4. A special application example; 5 . Simple lattice models; 5.1. Ideal periodic lattices; 5.2. Distortions of the first kind; 5.3. Distortions of the second kind; 5.4. Inhomogeneous coordination statistics; References; Chapter 4. Characterization of polymer deformation by vibrational spectroscopy; 1. Introduction; 2. Experimental and instrumentation; 3. Orientational measurements by infrared dichroism; 4. Segmental mobility in liquid crystalline side-chain polymers
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Sommario/riassunto

A book on the study of orientation and oriented polymers This book begins with an overview of the orientation phenomenon. Oriented Polymer Materials was published to focus on the importance of oriented polymeric materials. It includes basic techniques for the study and characterization of oriented polymers. It also covers different representatives of oriented polymer materials and approaches to the improvement of their mechanical properties. The book contains chapters produced by an array of contributing authors from around the world.