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	 Properties; A. Memory; B. Solubility and Flexibility; C. Cross-Links; 3.5 A Few Definitions of Polymers (Macromolecules) 3.6 Polymer Structure3.7 Molecular Weights of Polymers; 3.8 Polymeric Transitions; 3.9 Testing of Polymers; 3.10 Chemical Names of Polymers; 3.11 Trade Names of Polymers; 3.12 Importance of Descriptive Nomenclature; 3.13 Marketplace; Glossary; Review Questions; Bibliography; Answers to Review Questions; 4 Relationships Between the Properties and Structure of Giant Molecules; 4.1 General; 4.2 Elastomers; 4.3 Fibers; 4.4 Plastics; 4.5 Adhesives; 4.6 Coatings; 4.7 Polyblends and Composites; 4.8 Crystalline-Amorphous Structures; A. Chain Flexibility; B. Intermolecular Forces C. Structural RegularityD. Steric Effects; 4.9 Summary; Glossary; Review Questions; Bibliography; Answers to Review Questions; 5 Physical and Chemical Testing of Polymers; 5.1 Testing Organizations; 5.2 Evaluation of Test Data; 5.3 Stress/Strain Relationships; 5.4 Heat Deflection Test; 5.5 Coefficient of Linear Expansion; 5.6 Compressive Strength; 5.7 Flexural Strength; 5.8 Impact Test; 5.9 Tensile Strength; 5.10 Hardness Test; 5.11 Glass Transition Temperature and Melting Point; 5.12 Density (Specific Gravity); 5.13 Resistance to Chemicals; 5.14 Water Absorption; Glossary; Review Questions; 6.1 Introduction; 6.2 Polyethylene; 6.5 Ultrahigh-Molecular-Weight Polyethylene; 6.6 Linear Low-Density Polyethylene; 6.7 Cross-Linked Polyethylene; 6.8 Other Copolymers of Ethylene; 6.9 Polypropylene; 6.10 Other Polyolefins; 6.11 Polystyrene; 6.12 Styrene Copolymers; 6.13 Poly(Vinyl Chloride) and Copolymers; 6.14 Fluorocarbon Polymers; 6.13 Poly(Vinyl Chloride) and Copolymers; 6.14 Fluorocarbon Polymers; 6.15 Acrylic Polymers; 6.16 Poly(Vinyl Acetate); 6.17 Poly(Vinyl Ethers); 6.18 Cellulosics; 6.19 Plastics Processing A. Introduction
Sommario/riassunto	The Second Edition of Giant Molecules presents an introductory textbook on large molecules that exhibit specific physical and biological properties related to their size, orientation, and environment, making this subject accessible to students from high school to universities.Written by Charles Carraher, author of more than forty books on the subject, this up-to-date guide presents material in an integrated fashion, marrying fundamentals with illustrative applications. The text assumes no previous formal scientific training, and includes new and updated questions and answers, a glossary of