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Nota di contenuto	Cover; Part One; Volume I Cover; Hydrocolloids: Physical Chemistry and Industrial Application of Gels, Polysaccharides, and Proteins; Copyright Page; Preface to Part 1; Contents; PART 1: Introductory Lecture; Chapter 1. Short -range and long-range forces between hydrophilic surfaces and biopolymers in aqueoussolutions; PART 2: Structure Of Gels And Gelation; Chapter 2. Thermoreversible gelation with multiple junctions in associating polymers; Chapter 3. Effect of electric charges on the volume phase transition of thermosensitive gels.; Chapter 4. Structure and dynamics of ovalbumin gels Chapter 5. Thermoreversible gelation strongly coupled to polymer conformational transition Chapter 6. Hydrogels from N-isopropylacrylamide oligomer; Chapter 7. Kinetic effects of the gel size on the thermal behavior of poly- (N-isopropylacrylamide) gels : a calorimetric study; Chapter 8. Characterizations of dehydrated polyacrylamide gel and its formation process; Chapter 9. Viscoelastic behavior of tungstic acid gel during the gelation process; Chapter 10. The volume phase transition of DNA and RNA gels

Chapter 11. Rheological properties and microstructure of monodispersed O/W emulsion agar gel
 PART 3: Polysaccharides;
 Chapter 12. Viewing biopolymer networks, their formation and breakdown by AFM; Chapter 13. Thermally induced gels obtained with some amphiphilic polysaccharide derivatives: synthesis, mechanism and properties; Chapter 14. Industrial production of new emulsifying polysaccharide by plant cell culture; Chapter 15. Production and applications of novel plant cell culture polysaccharides; Chapter 16. Structural features of polysaccharide of *Hericium erinaceum*
 Chapter 17. Structural and physical features of polysaccharide of *Tremella aurantia*
 Chapter 18. Dynamic light scattering of dilute and semi-dilute xanthan solutions and comparison with rheological characteristics; Chapter 19. Relationships between structural features, molecular weight and rheological properties of cereal β -D-glucans; Chapter 20. New biopolymers produced by nitrogen fixing microorganisms for use in foods; Chapter 21. Studies on production and rheology of a polysaccharide synthesized by *Beijerinckia* sp strain 7070
 Chapter 22. Heteropolysaccharides produced by *Xanthomonas campestris* pv *pruni* C24
 Chapter 23. Rheological properties of guar galactomannan solutions filled with PARTICULATE inclusions; Chapter 24. Characterization of chitosan film and structure in solution; Chapter 25. Elsinan, a potential food hydrocolloid produced by *elsinoe* species: properties and enzymatic degradation; Chapter 26. Effects of alkali metal salts on the viscoelasticity of κ -carrageenan and γ -carrageenan; Chapter 27. Texture and structure of high-pressure-frozen konjac
 Chapter 28. Extraction of highly gelling pectins from sugar beet pulp

Sommario/riassunto

Hydrocolloids
