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Descrizione fisica	1 online resource (xvi, 509 pages) : digital, PDF file(s)
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Introduction -- 2. Sedimentation -- 3. Electrophoresis -- 4. Quasielastic light scattering and diffusion -- 5. Solvent and small-molecule motion -- 6. Segmental diffusion -- 7. Dielectric relaxation and chain dimensions -- 8. Self- and tracer diffusion -- 9. Probe diffusion -- 10. Dynamics of colloids -- 11. The dynamic structure factor -- 12. Viscosity -- 13. Viscoelasticity -- 14. Nonlinear viscoelastic phenomena -- 15. Qualitative summary -- 16. Phenomenology -- 17. Afterword: hydrodynamic scaling model for polymer dynamics.
Sommario/riassunto	Presenting a completely new approach to examining how polymers move in non-dilute solution, this book focuses on experimental facts, not theoretical speculations, and concentrates on polymer solutions, not dilute solutions or polymer melts. From centrifugation and solvent dynamics to viscosity and diffusion, experimental measurements and

their quantitative representations are the core of the discussion. The book reveals several experiments never before recognized as revealing polymer solution properties. A novel approach to relaxation phenomena accurately describes viscoelasticity and dielectric relaxation and how they depend on polymer size and concentration. Ideal for graduate students and researchers interested in the properties of polymer solutions, the book covers real measurements on practical systems, including the very latest results. Every significant experimental method is presented in considerable detail, giving unprecedented coverage of polymers in solution.
