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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Tensor Notation -- Rheological Properties -- Kinematics and Equations of Balance -- Constitutive Equation -- Inelastic Models and Linear Viscoelasticity -- Steady Viscometric Flows -- Polymer Solutions -- Suspensions -- DPD -- Problems.
Sommario/riassunto	This book presents an introduction to viscoelasticity; in particular, to the theories of dilute polymer solutions and dilute suspensions of rigid particles in viscous and incompressible fluids. These theories are important, not just because they apply to practical problems of industrial interest, but because they form a solid theoretical base upon which mathematical techniques can be built, from which more complex

theories can be constructed, to better mimic material behaviour. The emphasis is not on the voluminous current topical research, but on the necessary tools to understand viscoelasticity at a first year graduate level. The main aim is to provide a still compact book, sufficient at the level of first year graduate course for those who wish to understand viscoelasticity and to embark in modeling of viscoelastic multiphase fluids. To this end, a new chapter on Dissipative Particle Dynamics (DPD) was introduced which is relevant to model complex-structured fluids. All the basic ideas in DPD are reviewed, with some sample problems to illustrate the methodology.