1. Record Nr. UNINA9910451612503321

Titolo	Non-equilibrium soft matter physics [[electronic resource] /] / editors, Shigeyuki Komura, Takao Ohta
Pubbl/distr/stampa	Singapore, : World Scientific Pub. Co., 2012
ISBN	1-280-66957-8 9786613646507 981-4360-63-5
Descrizione fisica	1 online resource (435 p.)
Collana	Series in soft condensed matter, , 1793-737X ; ; v. 4
Altri autori (Persone)	KomuraShigeyuki OhtaTakao
Disciplina	530.41
Soggetti	Condensed matter Equilibrium Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Foreword; Preface; Contents; 1. Onsager's Variational Principle in Soft Matter Dynamics M. Doi; 1. Introduction; 2. Particle Motion in Viscous Fluid; 2.1. Stokesian hydrodynamics; 2.2. Hydrodynamic reciprocal relation; 2.3. Hydrodynamic variational principle; 3. Onsager's Variational Principle; 3.1. Onsager's kinetic equation; 3.2. Validity of the variational principle; 3.3. Merit of the variational principle; 3.4. Reciprocal relation in the kinetic equation; 3.5. Forces needed to controll the state variables; 4. Brownian Motion; 4.1. Diffusion equation 4.2. Reciprocal relation in the diffusion equation 4.3. Forces acting on the semi-permeable membrane; 5. Rotational Brownian Motion; 5.1. State variables of a rod-like particle; 5.2. Diffusion equation for (,); 5.3. Diffusion equation for (u); 5.4. Diffusion equation in flow field; 5.5. Expression for the stress tensor; 6. Coupling between Diffusion and Flow; 6.1. Diffusion in concentrated solutions; 6.2. Coupling between solute diffusion and solution flow; 6.3. Phase separation; 7. Gel Dynamics; 8. Liquid Crystals; 9. Conclusion; Acknowledgments Appendix A. Proof of the Hydrodynamic Reciprocal Relation References; 2. Rheo-Dielectric Behavior of Soft Matters H. Watanabe, Y. Matsumiya,

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Sommario/riassunto

Soft matter is a concept which covers polymers, liquid crystals, colloids, amphiphilic molecules, glasses, granular and biological materials. One of the fundamental characteristic features of soft matter is that it exhibits various mesoscopic structures originating from a large number of internal degrees of freedom of each molecule. Due to such intermediate structures, soft matter can easily be brought into non-equilibrium states and cause non-linear responses by imposing external fields such as an electric field, a mechanical stress or a shear flow. Volume 4 of the series in Soft Condensed Ma