Record Nr. UNINA9910298653703321 Polyelectrolytes: Thermodynamics and Rheology / / edited by Visakh P. **Titolo** M., Oguz Bayraktar, Guillermo Alfredo Picó Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2014 **ISBN** 3-319-01680-6 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (388 p.) Engineering Materials, , 1612-1317 Collana Disciplina 547.704572 Soggetti Materials science Thermodynamics Heat engineering Heat transfer Mass transfer **Polymers** Characterization and Evaluation of Materials Engineering Thermodynamics, Heat and Mass Transfer Polymer Sciences Lingua di pubblicazione Inglese **Formato** Materiale a stampa

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Nota di contenuto Polyelectrolyte: Thermodynamics and Rheology -- Structure and

Polyelectrolyte: Thermodynamics and Rheology -- Structure and Thermodynamics of Polyelectrolyte Complexes -- Polyelectrolyte: Science and Application -- Biological polyelectrolytes: Solutions, Gels, Intermolecular complexes and nanoparticles -- Polyelectrolyte Hydrogels: Thermodynamics -- Thermodynamic and rheological properties of polyelectrolyte systems -- Complexes formation between proteins and polyelectrolytes and their application in the downstream processes of enzyme purification -- Polyelectrolyte complexes: Bridging the ensemble average – single-molecule strategies -- Stratified Interpolyelectrolyte Complexes: Fabrication, Structure and Properties -- Monte Carlo Studies in Polyelectrolyte Solutions: Structure

and Thermodynamics -- .

Sommario/riassunto This book offers a valuable reference source to graduate and post

graduate students, engineering students, research scholars polymer

engineers from industry. The book provides the reader with current developments of theoretical models describing the thermodynamics polyelectrolytes as well as experimental findings. A particular emphasis is put on the rheological description of polyelectrolyte solutions and hydrogels.