Record Nr. UNINA9910137374603321 Soft Matter at Aqueous Interfaces / / edited by Peter Lang, Yi Liu Titolo Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2016 **ISBN** 3-319-24502-3 Edizione [1st ed. 2016.] 1 online resource (VIII, 555 p. 230 illus., 116 illus. in color.) Descrizione fisica Lecture Notes in Physics, , 0075-8450;; 917 Collana Disciplina 530.417 Soggetti Amorphous substances Complex fluids Optical materials Electronic materials Polymers Physical chemistry Soft and Granular Matter, Complex Fluids and Microfluidics Optical and Electronic Materials Polymer Sciences **Physical Chemistry** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. From the Contents: Thermodynamics of interfaces -- Basics of Nota di contenuto Electrochemistry -- Introduction to depletion forces and phase behaviour of colloid mixtures -- Interfaces of binary mixtures --Dynamics of surfactants and polymers at liquid interfaces. This book covers the science of interfaces between an aqueous phase Sommario/riassunto and a solid, another liquid or a gaseous phase, starting from the basic physical chemistry all the way to state-of-the-art research developments. Both experimental and theoretical methods are treated thanks to the contributions of a distinguished list of authors who are all active researchers in their respective fields. The properties of these

> interfaces are crucial for a wide variety of processes, products and biological systems and functions, such as the formulation of personal care and food products, paints and coatings, microfluidic and lab-on

a-chip applications, cell membranes, and lung surfactants. Accordingly, research and expertise on the subject are spread over a broad range of academic disciplines and industrial laboratories. This book brings together knowledge from these different places with the aim of fostering education, collaborations and research progress.