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Titolo	Interfacial phenomena and colloid stability . Volume 1 : basic principles // Tharwat F. Tadros
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Descrizione fisica	1 online resource (358 p.)
Collana	Interfacial phenomena and Colloid Stability ; ; Volume 1
Classificazione	VE 8000
Disciplina	620/44
Soggetti	Surfaces (Technology) - Analysis Solid-liquid interfaces Chemistry, Technical Colloids - Industrial applications
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 at the end of each chapters and index.
Nota di contenuto	Front matter -- Preface -- Contents -- 1. General introduction -- 2. Origin of charge at interfaces: Structure of the electrical double layer -- 3. Electrokinetic phenomena and zeta potential -- 4. Van der Waals attraction -- 5. Double layer repulsion -- 6. Combination of double layer repulsion and van der Waals attraction theory of colloid stability -- 7. The liquid/liquid interface and surfactant adsorption -- 8. The solid/liquid interface and surfactant adsorption -- 9. Polymers at interfaces -- 10. Interaction between particles or droplets containing adsorbed polymer layers and the theory of steric stabilization -- 11. Wetting and spreading -- 12. Dynamic process of adsorption and wetting -- 13. Particle deposition and adhesion -- Index
Sommario/riassunto	This fundamental book on interfacial phenomena forms the basis of application of interface and colloid science to various disperse systems. These include suspensions, emulsions, nano-dispersions, wetting, spreading, deposition and adhesion of particles to surfaces. These systems occur in most industrial applications, such as personal care

and cosmetic formulations, pharmaceutical systems particularly for controlled and targeted delivery of drugs, agrochemical formulations and enhancement of their biological performance, paints and coatings as well as most food formulations. These applications are described in volume 2. The text is very valuable for formulation chemists, chemical engineers and technologies who are involved in such applications. In addition this fundamental text is also valuable for research scientists and Ph.D. students investigating various aspects of interface and colloid science.

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