

1. Record Nr.	UNINA9910983363203321
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Titolo	Soft Matter : Fundamentals and Applications / / by Ashim Kumar Dutta
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2025
ISBN	9789819606245 9789819606238
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (143 pages)
Disciplina	530.41
Soggetti	Soft condensed matter Colloids Biophysics Membranes (Biology) Soft and Granular Matter Soft Materials Gels and Hydrogels Membrane Biophysics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	What is Soft Matter? -- Classical Thermodynamics --A Primer -- Interfacial Physics -- Experimental Methods for Soft Matter Characterization -- Surfactants and Self-Assembly.-Emulsions -- Hydrogels -- Applications.
Sommario/riassunto	This book presents (1) a tour through the complex and mesmerizing world of molecular interactions without recourse to complicated theoretical derivations and (2) an attempt to close the existing academia—industry knowledge and expertise gap by providing a pathway to convert complex theories into real products that would be of use to industry and also enhance the quality of life. Various daily use products have their roots in what we know as “Soft Matter”. It caters to a wide audience that will include graduate students, researchers, product designers, and product development engineers and experts from a wide range of industries pharmaceuticals, foods, cosmetics, paints, lubricants among others. Specifically, in one chapter entitled

“Applications”, a detailed step-by-step approach has been followed to develop various products with commentaries on the various theories that are being used in its design. Last but not least, the language is kept simple and straightforward for ease of reading.
