

1. Record Nr.	UNINA990001280580403321
Autore	Schäffer, Juan Jorge
Titolo	Geometry of spheres in normed spaces / by Schaffer Juan Jorge
Pubbl/distr/stampa	New York [etc.] : Marcel Dekker, 1976
Descrizione fisica	Lecture Notes in Pure and normed Applied Ma thematics, 20
Locazione	MA1
Collocazione	C-7-(20
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
2. Record Nr.	UNINA9910830668103321
Titolo	Multivalency : concepts, research & applications / / edited by Jurriaan Huskens ... [et al.]
Pubbl/distr/stampa	Hoboken, N.J., : Wiley, 2018 Hoboken, N.J. : , : Wiley, , 2018
ISBN	1-119-14349-7 1-119-14347-0 1-119-14350-0
Edizione	[1st edition]
Descrizione fisica	1 online resource (1 volume) : illustrations
Classificazione	431.1
Disciplina	541/.224
Soggetti	Valence (Theoretical chemistry) Multivalent molecules
Lingua di pubblicazione	Non definito
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Other editors: Leonard J. Prins, Rainer Haag, Bart Jan Ravoo Includes bibliographical references and index
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	General Introduction to Multivalent Interactions. Additivity of Energy

Contributions in Multivalent Complexes / Hans-Jorg Schneider -- Models and Methods in Multivalent Systems / Jurriaan Huskens -- Design Principles for Super Selectivity using Multivalent Interactions / Tine Curk, Jure Dobnikar, Daan Frenkel -- Multivalency in Biosystems / Jens Dernedde -- Multivalent Systems in Chemistry. Multivalency in Cyclodextrin/Polymer Systems / Akihito Hashidzume, Akira Harada -- Cucurbit[n]uril-Mediated Multiple Interactions / Zehuan Huang, Xi Zhang -- Multivalency as a Design Criterion in Catalyst Development / Paolo Scrimin, Maria A Cardona, Carlos M Leon Prieto, Leonard J Prins -- Multivalent Molecular Recognition on the Surface of Bilayer Vesicles / Jens Voskuhl, Ulrike Kauscher, Bart Jan Ravoo -- Multivalent Systems in Biology. Blocking Pathogens by Multivalent Inhibitors / Sumati Bhatia, Benjamin Ziem, Rainer Haag -- Multivalent Protein Recognition Using Synthetic Receptors / Akash Gupta, Moumita Ray, Vincent M Rotello -- Multivalent Calixarenes for the Targeting of Biomacromolecules / Francesco Sansone, Alessandro Casnati -- Cucurbit[n]uril Assemblies for Biomolecular Applications / Emanuela Cavatorta, Luc Brunsved, Jurriaan Huskens, Pascal Jonkheijm -- Multivalent Lectin-Glycan Interactions in the Immune System / Joao T Monteiro, Bernd Lepenies -- Blocking Disease Linked Lectins with Multivalent Carbohydrates / Marjon Stel, Roland J Pieters.

Sommario/riassunto

Connects fundamental knowledge of multivalent interactions with current practice and state-of-the-art applications. Multivalency is a widespread phenomenon, with applications spanning supramolecular chemistry, materials chemistry, pharmaceutical chemistry and biochemistry. This advanced textbook provides students and junior scientists with an excellent introduction to the fundamentals of multivalent interactions, whilst expanding the knowledge of experienced researchers in the field. *Multivalency: Concepts, Research & Applications* is divided into three parts. Part one provides background knowledge on various aspects of multivalency and cooperativity and presents practical methods for their study. Fundamental aspects such as thermodynamics, kinetics and the principle of effective molarity are described, and characterisation methods, experimental methodologies and data treatment methods are also discussed. Parts two and three provide an overview of current systems in which multivalency plays an important role in chemistry and biology, with a focus on the design rules, underlying chemistry and the fundamental principles of multivalency. The systems covered range from chemical/materials-based ones such as dendrimers and sensors, to biological systems including cell recognition and protein binding. Examples and case studies from biochemistry/bioorganic chemistry as well as synthetic systems feature throughout the book. Introduces students and young scientists to the field of multivalent interactions and assists experienced researchers utilising the methodologies in their work. Features examples and case studies from biochemistry/bioorganic chemistry, as well as synthetic systems throughout the book. Edited by leading experts in the field with contributions from established scientists. *Multivalency: Concepts, Research & Applications* is recommended for graduate students and junior scientists in supramolecular chemistry and related fields, looking for an introduction to multivalent interactions. It is also highly useful to experienced academics and scientists in industry working on research relating to multivalent and cooperative systems in supramolecular chemistry, organic chemistry, pharmaceutical chemistry, chemical biology, biochemistry, materials science and nanotechnology.