1. Record Nr. UNINA9911019093803321

Titolo	The lock-and-key principle : the state of the art--100 years on / / edited by Jean-Paul Behr
Pubbl/distr/stampa	Chichester [England] ; ; New York, : Wiley, c1994
ISBN	9786612122286 9781282122284 1282122282 9780470511411 0470511419 9780470511404 0470511400
Descrizione fisica	1 online resource (340 p.)
Collana	Perspectives in supramolecular chemistry ; ; v. 1
Altri autori (Persone)	BehrJean-Paul
Disciplina	574.8/8
Soggetti	Molecular recognition
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 and index.
Nota di contenuto	The Lock-and-Key Principle; Contents; Contributors; Preface; 1 Emil Fischer's Lock-and-Key Hypothesis after 100 Years - Towards a Supracellular Chemistry; 2 Molecular Recognition in Biology: Models for Analysis of Protein-Ligand Interactions; 3 New Biocatalysts via Chemical Modification; 4 Oligonucleotides: Superspecific Ligands for Targeting Nucleic Acids and Proteins and Development of Molecular Devices; 5 Macrocycles and Antibodies as Catalysts; 6 Lock-and-Key Processes at Crystalline Interfaces: Relevance to the Spontaneous Generation of Chirality 7 A Model of the Origin of Life and Perspectives in Supramolecular Engineering8 Perspectives in Supramolecular Chemistry-From the Lock-and-Key Image to the Information Paradigm; Index
Sommario/riassunto	Published 100 years after Emil Fischer first proposed the lock-and-key principle, this volume provides a complete review of the subject to date and offers suggestions for futher research. The major impact of the lock-and-key principle on the chemical, biomedical and materials sciences is discussed by leaders in the field, with chapters dedicated to

molecular recognition, nucleic acid and protein chemistry, crystallography and the development of Emil Fischer's initial ideas. The Lock-and-Key Principle is the most up-to-date review of progress in supramolecular chemistry and the lock-and-key principle and will become the essential guide to the past, present and future of this remarkable principle.