Record Nr. UNINA9910877789403321 Functional synthetic receptors / / Thomas Schrader, Andrew D. **Titolo** Hamilton (eds.) Pubbl/distr/stampa Weinheim, : Wiley-VCH, c2005 **ISBN** 1-280-52059-0 9786610520596 3-527-60572-X 3-527-60553-3 Descrizione fisica 1 online resource (442 p.) 35.53 Classificazione Altri autori (Persone) SchraderThomas HamiltonAndrew D 547.1226 Disciplina Soggetti Supramolecular chemistry Cell receptors 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 Functional Synthetic Receptors: Table of Contents: Preface: List of Contributors: 1 Artificial (Pseudo)peptides for Molecular Recognition and Catalysis; 1.1 Introduction; 1.2 Recognition of Biological Targets by Pseudo-peptides: 1.2.1 Introduction: 1.2.2 Polyamides as Sequencespecific DNA-minor-groove Binders; 1.2.3 Peptide Nucleic Acids; 1.2.4 Protein Recognition by (Pseudo)peptides; 1.3 Synthetic (Pseudo) peptide-based Supermolecules: From Structure to Function; 1.3.1 Catalytic (Pseudo)peptides; 1.3.2 (Pseudo)peptides Altering Membrane Permeability 1.3.3 Nanoparticle- and Dendrimer-based Functional (Pseudo) peptides1.4 Combinatorial Selection of Functional (Pseudo)peptides; 1.5 Conclusions; References; 2 Carbohydrate Receptors; 2.1 Introduction; 2.2 Carbohydrate Receptors Employing Noncovalent Interactions; 2.2.1 Recognition in Organic Solvents; 2.2.2 Recognition in Two-phase Systems; 2.2.3 Carbohydrate Recognition in Water; 2.3 Receptors Employing B-O Bond Formation; 2.3.1 Carbohydrate Recognition in Water: 2.3.2 Carbohydrate Recognition in Water:

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Sommario/riassunto

A timely overview of this rapidly-expanding topic, covering the most important classes of compounds and incorporating the latest literature. With its application-oriented approach, this book is the first to emphasize current and potential applications, extending to such fields as materials science, bioorganic chemistry, medicinal chemistry, and organic synthesis. In the biological context in particular, the book clarifies which receptor systems work well in water or better under physiological conditions. From the contents:* Amino Acid, Peptid and Protein Receptors* Carbohydrate Rece