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| 1. Record Nr.           | UNINA9910830554803321  |
| Titolo                  | Foldamers [[electronic resource] ] : structure, properties, and applications // edited by Stefan Hecht and Ivan Huc ; foreword by Francois Diederich   |
| Pubbl/distr/stampa      | Weinheim, : Wiley-VCH, c2007   |
| ISBN                    | 1-281-08796-3<br>1-282-11841-2<br>9786612118418<br>9786611087968<br>3-527-61147-9<br>3-527-61148-7   |
| Descrizione fisica      | 1 online resource (459 p.)   |
| Altri autori (Persone)  | HechtStefan <1974-><br>HucIvan   |
| Disciplina              | 541<br>547.7   |
| Soggetti                | Chemistry, Technical<br>Molecules - Models<br>Oligomers  |
| 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       | Foldamers; Foreword; Contents; Preface; List of Contributors; Part 1 Structure: Foldamer Design Concepts; 1 Foldamers Based on Local Conformational Preferences; 1.1 Introduction; 1.2 Rigidly Locked Molecules; 1.3 Predictable Foldamers; 1.3.1 Local Conformational Control; 1.3.2 Folded Conformations of -conjugated Systems; 1.3.2.1 Crescents and Helices; 1.3.2.2 Linear Strands; 1.3.2.3 Macrocycles; 1.3.3 Partially -conjugated Oligomers; 1.4 Semi-rigid Backbones; 1.4.1 Tertiary Aromatic Amides, Imides and Ureas; 1.4.2 Tertiary Aliphatic Amides: Polyprolines and Peptoids<br>1.4.3 Hindered Polymer and Oligomer Backbones<br>1.5 Conformational Transitions; 1.6 Conclusion and Perspectives; References; 2 Foldamers Based on Remote Intrastrand Interactions; 2.1 Introduction; 2.2 What |

can be Learned from Strategies used to Control Conformations of - Polypeptides?; 2.3 Helices from Homogeneous Oligomeric Backbones with Periodicity at the Monomer Level: -Peptides and their Analogs; 2.3.1 Compact Helices with Large (>10 atoms) H-bonded Rings; 2.3.1.1 The Homologation Strategy: - and -Peptide Foldamers 2.3.1.2 Imposing Backbone Conformational Restriction/Pre-organization for Optimal Helical Folding 2.3.1.3 Folding in an Aqueous Environment; 2.3.1.4 Dynamics of - and -Peptide Helices: Evidence for Noncooperative Folding/Unfolding Processes; 2.3.2 Extended Helices with Small H-bonded Rings Centered at a Single Residue; 2.3.2.1 -Peptides: the -Helix; 2.3.2.2 -Peptides with Specific Conformation-stabilizing Elements; 2.3.2.3 Stabilizing Local Backbone Conformation by Inverse-Bifurcation Involving an Additional Heteroatom; 2.4 Oligoamide Mixed Helices 2.4.1 The -Oligopeptide Precedent: from Antibiotic Gramicidin A to Poly-Gln Aggregates in Huntington's Disease 2.4.2 Introducing Periodicity at the Level of a Dimer Unit in -Peptides leads to a Remarkably Stable Mixed Helical Fold; 2.4.2.1 By Mixing (2)- and (3)- Amino Acids; 2.4.2.2 Additional Substitution Patterns Stabilizing the Mixed 10/12- (12/10-) Helix; 2.4.3 Extending the Concept of Mixed Helices; 2.5 Nonperiodic Structures: Open Chain -Turn-like Motifs and Hairpins in Designed Homo-oligomers; 2.5.1 Sheet-forming -peptides; 2.5.2 Turn Segment for Hairpin Formation 2.6 Expanding Structural Diversity with Heterogeneous Backbones 2.6.1 From Discrete -Amino Acid Guests in -Helices to Helical , - and , -Peptide Hybrids; 2.6.2 Hairpins from , -Peptide Hybrids; 2.6.3 Sculpting New Shapes by Integrating H-Bonding, Aromatic Interactions and Multiple Levels of Pre-organization; 2.7 Conclusion and Outlook; References; 3 Foldamers Based on Solvophobic Effects; 3.1 Introduction; 3.2 Learning from Solvophobically Driven Assemblies - Intermolecular Solvophobic Interactions; 3.3 Learning from Synthetic and Biological Polymers 3.4 Recent Advances in Foldamers Based on Solvophobic Effects

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## Sommario/riassunto

This truly comprehensive treatise of foldamers, from synthesis to applications in bio-, material-, and nanoscience is at once an introduction to the topic, while providing in-depth accounts on various aspects clearly aimed at the specialist. The book is clearly structured, with the first part concentrating on structure and foldamer design concepts, while the second part covers functional aspects from properties to applications. The international team of expert authors provides overviews of synthetic approaches as well as analytical techniques.

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| 2. Record Nr.           | UNICAMPANIAVAN00283886   |
| Autore                  | Stutzmann, Martin  |
| Titolo                  | The Physics of Renewable Energy / Martin Stutzmann, Christoph Csoklich                               |
| Pubbl/distr/stampa      | Cham, : Springer, 2022   |
| Descrizione fisica      | xiv, 194 p. : ill. ; 24 cm   |
| Altri autori (Persone)  | Csoklich, Christoph  |
| Soggetti                | 00-XX - General and overarching topics; collections [MSC 2020]<br>00A79 (77-XX) - Physics [MSC 2020] |
| Lingua di pubblicazione | Inglese  |
| Formato                 | Materiale a stampa   |
| Livello bibliografico   | Monografia   |