Record Nr. UNINA9910298629703321 Hydrogen Bonded Supramolecular Structures / / edited by Zhan-Ting **Titolo** Li, Li-Zhu Wu Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, . 2015 **ISBN** 3-662-45756-3 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (357 p.) Lecture Notes in Chemistry, , 0342-4901;; 87 Collana Disciplina 541.226 Soggetti Organic chemistry **Polymers** Crystallography Optical materials Electronic materials **Organic Chemistry Polymer Sciences** Crystallography and Scattering Methods Optical and Electronic Materials 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 at the end of each chapters. Hydrogen Bonding Motifs: New Progresses -- Understanding of Non-Nota di contenuto covalent Interactions Involving Organic Fluorine -- Hydrogen Bonding in Supramolecular Crystal Engineering -- Hydrogen Bonding-Mediated Self-assembly of Aromatic Supramolecular Duplexes -- Hydrogen Bonding-Driven Anion Recognition -- Formation of Hydrogen-Bonded Self-Assembled Structures in Polar Solvents -- Hydrogen Bonded Capsules: Chemistry in Small Spaces -- Hydrogen Bonded Organic Nanotubes -- H-Bonding-Assisted One-Pot Macrocyclization for Rapid

Sommario/riassunto

This book covers the advances in the studies of hydrogen-bondingdriven supramolecular systems made over the past decade. It is divided into four parts, with the first introducing the basics of hydrogen bonding and important hydrogen bonding patterns in

Construction of H-Bonded Macrocyclic Aromatic Foldamers --

Hydrogen-Bonded Supramolecular Polymers.

solution as well as in the solid state. The second part covers molecular recognition and supramolecular structures driven by hydrogen bonding. The third part introduces the formation of hollow and giant macrocycles directed by hydrogen bonding, while the last part summarizes hydrogen bonded supramolecular polymers. This book is designed to bring together in a single volume the many important aspects of hydrogen bonding supramolecular chemistry and will be a valuable resource for graduates and researchers working in supramolecular and related sciences. Zhan-Ting Li, PhD, is a Professor of Organic Chemistry at the Department of Chemistry, Fudan University, China Li-Zhu Wu, PhD, is a Professor of Organic Chemistry at the Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, China.