Record Nr. UNINA9910298612003321 Hydrogen Bonded Supramolecular Materials / / edited by Zhan-Ting Li, **Titolo** Li-Zhu Wu Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, . 2015 **ISBN** 3-662-45780-6 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (238 p.) Collana Lecture Notes in Chemistry, , 0342-4901;; 88 Disciplina 546.2 Soggetti Optical materials Electronic materials Organic chemistry **Polymers** Biomaterials Optical and Electronic Materials **Organic Chemistry Polymer Sciences** 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. Nota di contenuto Hydrogen Bonding-Controlled Photoinduced Electron and Energy Transfer -- Hydrogen Bonding in Supramolecular Nanoporous Materials -- Hydrogen Bonding for the Self-assembly of Organogels and Hydrogels -- Designing Charge-assisted Hydrogen Bonded Supramolecular Gelators -- Hydrogen Bonging for Supramolecular Liquid Crystals -- Hydrogen Bonding for Molecular, Macromolecular and Supramolecular Materials. Sommario/riassunto This book is an up-to-date text covering topics in utilizing hydrogen bonding for constructing functional architectures and supramolecular materials. The first chapter addresses the control of photo-induced electron and energy transfer. The second chapter summarizes the formation of nano-porous materials. The following two chapters introduce self-assembled gels, many of which exhibit unique functions. Other chapters cover the advances in supramolecular liquid crystals and

the versatility of hydrogen bonding in tuning/improving the properties

and performance of materials. This book is designed to bring together in a single volume the most important and active fields of hydrogen bonding strategy for designing supramolecular materials. The book will be a valuable resource for graduates and researchers working in the fields of supramolecular chemistry and materials 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.