Record Nr. UNINA9910825278403321 **Titolo** Tomorrow's chemistry today: concepts in nanoscience, organic materials and environmental chemistry / / edited by Bruno Pignataro Pubbl/distr/stampa Weinheim, : Wiley-VCH, c2009 **ISBN** 9786612308109 9781282308107 1282308106 9783527628902 3527628908 9783527628919 3527628916 Edizione [2nd ed.] Descrizione fisica 1 online resource (458 p.) Altri autori (Persone) PignataroBruno Disciplina 547 Soggetti Chemistry, Organic Nanoscience Materials science Environmental chemistry Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Tomorrow's Chemistry Today: Concepts in Nanoscience, Organic Materials and Environmental Chemistry, Second Edition; Contents; Preface; List of Contributors; Member Societies; Part One: Self-Organization, Nanoscience and Nanotechnology: 1: Subcomponent Self-Assembly as a Route to New Structures and Materials; 1.1 Introduction; 1.2 Aqueous Cu(I); 1.3 Chirality; 1.4 Construction; 1.4.1 Dicopper Helicates: 1.4.2 Tricopper Helicates: 1.4.3 Catenanes and Macrocycles; 1.4.4 [2 x 2] Tetracopper(I) Grid; 1.5 Sorting; 1.5.1 Sorting Ligand Structures with Cu(I); 1.5.2 Simultaneous Syntheses of Helicates 1.5.3 Sorting within a Structure 1.5.4 Cooperative Selection by Iron and Copper; 1.6 Substitution/Reconfiguration; 1.6.1 New Cascade Reaction;

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Providing a glimpse into the future, the young scientists contributing here were considered to be the most important for tomorrow's chemistry and materials science. They present the state of the art in their particular fields of research, with topics ranging from new synthetic pathways and nanotechnology to green chemistry. Of major interest to organic chemists, materials scientists and biochemists.