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Nota di contenuto	Host-Guest-Systems Based on Nanoporous Crystals; Contents; List of Contributors; Part 1 Synthesis Routes for Functional Composites Based on Nanoporous Materials; References; 1 Guest Functionalized Crystalline Organic/Inorganic Nanohybrid Materials; 1.1 Introduction; 1.2 Direct Construction of Functional Host-Guest Compounds: Synthesis Between Scylla and Charybdis; 1.3 Stable Functional Structure-Directing Agents in the Synthesis of Porosils; 1.4 The Glycol Method for the Fast Synthesis of Aluminophosphates and the Occlusion of Organic Dye Molecules 1.5 Easily Crystallizing Inorganic Frameworks: Zincophosphates 1.6 Conclusions; Acknowledgments; References; 2 In Situ Synthesis of Azo Dyes and Spiropyran Dyes in Faujasites and their Photochromic Properties; 2.1 Introduction; 2.2 In Situ Synthesis of Azo Dyes in Faujasites; 2.3 In Situ Synthesis of Spiropyran Dyes in Faujasites; 2.4 Optical Switching of Azo and a Spiropyran Dyes in Molecular Sieves; 2.5 Conclusions; Acknowledgments; References; 3 Microwave-Assisted Crystallization Inclusion of Dyes in Microporous AlPO(4)-5 and

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#### Sommario/riassunto

Interest in nanoporous crystals as host-guest systems has risen dramatically over the past few years, such that this fascinating class of substances now plays an important role not only in material sciences, but also in numerous other disciplines, such as organic or supramolecular chemistry. With their unique characteristics, nanoporous crystals offer a wide range of possible applications: They are used as molecular sieves or membranes as well as catalytic converters. This work presents the very first overview of this exciting field. Readers will find everything they need to know about thes