Record Nr. UNINA9910144406303321 Chemistry of zeolites and related porous materials: synthesis and **Titolo** structure / / Ruren Xu ... [et al.] Pubbl/distr/stampa Singapore; ; Hoboken, N.J., : John Wiley & Sons (Asia), c2007 **ISBN** 1-282-37157-6 9786612371578 0-470-82237-6 0-470-82236-8 Descrizione fisica 1 online resource (695 p.) Altri autori (Persone) **XuRuren** Disciplina 666/.86 Soggetti Zeolites Porosity Mesoporous materials Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Introduction -- Structural chemistry of microporous materials --Synthetic chemistry of microporous compounds (I)-Fundamentals sand synthetic routes -- Synthetic chemistry of microporous compounds (II)-Special compositions, structures, and morphologies -- Crystallization of microporous compounds -- Preparation, secondary synthesis, and modification of zeolites -- Towards rational design and synthesis of inorganic microporous materials -- Synthesis, structure, and characterization of mesoporous materials -- Porous host-guest advanced materials. Sommario/riassunto Widely used in adsorption, catalysis and ion exchange, the family of molecular sieves such as zeolites has been greatly extended and many advances have recently been achieved in the field of molecular sieves synthesis and related porous materials. Chemistry of Zeolites and Related Porous Materials focuses on the synthetic and structural chemistry of the major types of molecular sieves. It offers a systematic introduction to and an in-depth discussion of microporous, mesoporous, and macroporous materials and also includes metalorganic frameworks. Provides focused coverage of the ke