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Sommario/riassunto

The first book devoted to all aspects and types of mesoporous materials describes, in an in-depth and systematic manner, the step-by-step synthesis, synthesis mechanism, characterization, morphology control, hybridization, and applications of mesoporous molecular sieves. In so doing, it covers silicates, metal-doped silicates, non-silicates, and organic-inorganic hybrids. While the emphasis is on synthesis, the leading expert authors also discuss characterization and applications ranging from catalysis and biochemistry to optics and the use of these materials as templates for nanomaterial