

1. Record Nr.	UNINA9910800040903321
Titolo	Nanoporous materials : synthesis and applications // edited by Qiang Xu
Pubbl/distr/stampa	Boca Raton, Fla. : , : CRC Press, , 2013
ISBN	0-429-08636-9 1-4398-9207-5
Descrizione fisica	1 online resource (371 p.)
Altri autori (Persone)	XuQiang
Disciplina	620.116
Soggetti	Nanopores Nanostructured materials Porous materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Front Cover; Contents; Preface; Editor; Contributors; Chapter 1 - Nanoporous Polymers; Chapter 2 - Design, Synthesis, and Functions of Conjugated Microporous Polymers; Chapter 3 - Nanoporous Metal-Organic Frameworks; Chapter 4 - Ordered Mesoporous Carbons Prepared by a Soft-Templating Method; Chapter 5 - Dealloyed Nanoporous Metals; Chapter 6 - Synthesis of Mesoporous Metal Oxides and Metals and Their Applications; Chapter 7 - Preparation of Nanoporous Semiconductor-Based Materials for Photocatalytic Applications; Chapter 8 - Layered Zeolites: Structure Modification and Application Chapter 9 - Applications of Pore Voids of Mesoporous Silica to Acid Catalysts and Controlled Release Chapter 10 - Nanopore Glass; Chapter 11 - Open-Framework Germanates and Related Materials; Back Cover
Sommario/riassunto	In the past two decades, the field of nanoporous materials has undergone significant developments. As these materials possess high specific surface areas, well-defined pore sizes, and functional sites, they show a great diversity of applications such as molecular adsorption/storage and separation, sensing, catalysis, energy storage and conversion, drug delivery, and more. Nanoporous Materials: Synthesis and Applications surveys the key developments in the

synthesis of nanoporous materials in a broad range from soft porous materials-such as porous organic and metal-organic frameworks-to hard po
