1. Record Nr. UNINA9910830947603321 Autore Zhang Haifei Titolo Ice templating and freeze-drying for porous materials and their applications / / Haifei Zhang Pubbl/distr/stampa Weinheim, Germany:,: Wiley-VCH,, [2018] ©2018 **ISBN** 3-527-80742-X 3-527-80741-1 3-527-80739-X Edizione [1st edition] Descrizione fisica 1 online resource (436 pages) Disciplina 620.11696 Porous materials - Thermal properties Soggetti Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes index. Note generali Sommario/riassunto Filling a gap in the literature, this is the first book to focus on the fabrication of functional porous materials by using ice templating and freeze drying. Comprehensive in its scope, the volume covers such techniques as the fabrication of porous polymers, porous ceramics, biomimic strong composites, carbon nanostructured materials, nanomedicine, porous nanostructures by freeze drying of colloidal or nanoparticle suspensions, and porous materials by combining ice templating and other techniques. In addition, applications for each type of material are also discussed. Of great benefit to those working in the freeze-drying field and researchers in porous materials, materials

chemistry, engineering, and the use of such materials for various

applications, both in academia and industry.