1. Record Nr. UNINA9910583471403321 Titolo High-temperature thermal storage systems using phase change materials / / edited by Luisa F. Cabeza, Nguan H. Steven Tay Pubbl/distr/stampa London, England:,: Academic Press,, 2018 ©2018 **ISBN** 0-08-100954-2 0-12-805323-2 1 online resource (327 pages): illustrations, tables Descrizione fisica Disciplina 621.4028 Soggetti Heat storage Phase transformations (Statistical physics) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Sommario/riassunto "High-Temperature Thermal Storage Systems Using Phase Change Materials offers an overview of several high-temperature phase change material (PCM) thermal storage systems concepts, developed by several well-known global institutions with increasing interest in high temperature PCM applications such as solar cooling, waste heat and concentrated solar power (CSP). The book is uniquely arranged by concepts rather than categories, and includes advanced topics such as thermal storage material packaging, arrangement of flow bed, analysis

of flow and heat transfer in the flow bed, energy storage analysis, storage volume sizing and applications in different temperature ranges. By comparing the varying approaches and results of different research centers and offering state-of-the-art concepts, the authors share new and advanced knowledge from researchers all over the world. This reference will be useful for researchers and academia interested in the concepts and applications and different techniques involved in high temperature PCM thermal storage systems. Offers coverage of several high temperature PCM thermal storage systems concepts developed by

several leading research institutionsProvides new and advanced

knowledge from researchers all over the worldIncludes a base of material properties throughout"--