1. Record Nr. UNINA9910637784303321 Autore Krzywanski Jaroslaw Titolo Adsorption Desalination and Cooling Systems: Advances in Design, Modeling and Performance Basel, : MDPI - Multidisciplinary Digital Publishing Institute, 2022 Pubbl/distr/stampa **ISBN** 3-0365-5914-0 Descrizione fisica 1 online resource (260 p.) Soggetti Industrial chemistry and chemical engineering Technology: general issues Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Increasing energy efficiency; reducing energy demand, greenhouse gas Sommario/riassunto emissions, and the use of waste; and integrating renewable and recycled heat from low-temperature sources are significant challenges today and are key parts of 4th Generation District Heating (4GDH) concept. On the other hand, currently about one billion people around the world are suffering from water scarcity, and another three billion are approaching this situation. Only 2.5% of all water on the planet is freshwater, of which around 70% is not available and only 0.4% constitutes the most valuable portion of freshwater. Adsorption cooling technology is one of the most effective ways of addressing both these issues. This technology cools and produces potable water from the renewable and wasted heat of the near ambient temperature, including from sewage water, solar heat, and underground resources. This

the above-mentioned issues.

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