Record Nr. UNINA9910969312803321 Autore Dincer Ibrahim <1964-> Titolo Thermal energy storage: systems and applications / / Ibrahim Emir Dincer, Marc A. Rosen Hoboken, N.J., : Wiley, 2010 Pubbl/distr/stampa **ISBN** 9786612817564 9781119956624 1119956625 9781282817562 1282817566 9780470970751 0470970758 9780470970737 0470970731 Edizione [2nd ed.] Descrizione fisica 1 online resource (621 p.) Altri autori (Persone) RosenMarc (Marc A.) Disciplina 621.402/8 Soggetti Heat storage Mechanical engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Rev. ed. of: Thermal energy storage systems and applications / [edited by] Ibrahim Dincer, and Marc Rosen. c2002. Includes index. Includes bibliographical references at the end of each chapters and Nota di bibliografia index. Nota di contenuto THERMAL ENERGY STORAGE; Contents; About the Authors; Preface; Acknowledgements; 1 General Introductory Aspects for Thermal Engineering; 2 Energy Storage Systems; 3 Thermal Energy Storage (TES) Methods: 4 Thermal Energy Storage and Environmental Impact: 5 Thermal Energy Storage and Energy Savings; 6 Energy and Exergy Analyses of Thermal Energy Storage Systems; 7 Numerical Modeling and Simulation of Thermal Energy Storage Systems; 8 Thermal Energy Storage Case Studies; 9 Recent Advances in TES Methods, Technologies, and Applications; Appendix A Conversion Factors

Appendix B Thermophysical Properties Appendix C Glossary; Index

Sommario/riassunto

The ability of thermal energy storage (TES) systems to facilitate energy savings, renewable energy use and reduce environmental impact has led to a recent resurgence in their interest. The second edition of this book offers up-to-date coverage of recent energy efficient and sustainable technological methods and solutions, covering analysis, design and performance improvement as well as life-cycle costing and assessment. As well as having significantly revised the book for use as a graduate text, the authors address real-life technical and operational problems, enabling the reader to gain an