1. Record Nr. UNINA9910583326703321

Autore	Breeze Paul
Titolo	Power system energy storage technologies / / Paul Breeze
Pubbl/distr/stampa	London, United Kingdom : , : Academic Press, an imprint of Elsevier, , [2018] ©2018
ISBN	0-12-812903-4 0-12-812902-6
Descrizione fisica	1 online resource (101 pages)
Disciplina	333.794
Soggetti	Renewable energy sources
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	1 An Introduction to Energy Storage Technologies; An Energy Storage Overview; The History of Energy Storage Systems; Types of Energy Storage Technology; Global Energy Storage Capacity; 2 Pumped Storage Hydropower; Pumped Storage Hydropower Plant Design; Undersea Pumped Storage; Turbines and Motors; Plant Capacity; 3 Compressed Air Energy Storage; The Compressed Air Energy Storage Principle; Compressed Air Storage; Turbine Technology and Compressed Air Energy Storage Cycles; Adiabatic Compressed Air Energy Storage Isothermal Compressed Air Energy StorageLiquid Air Energy Storage; 4 Large-Scale Batteries; The Battery Principle; Lead-Acid Batteries; Nickel Cadmium Batteries; Lithium Batteries; Sodium Sulfur Batteries; Flow Batteries; Electric Vehicles; 5 Superconducting Magnetic Energy Storage; The Superconducting Energy Storage Principle; Applications of SMES; 6 Flywheels; The Flywheel Principle; Flywheel Performance Characteristics; Flywheel Applications; 7 Super-Capacitors; Energy Storage Capacitor Principles; Performance Characteristics; Applications; 8 Hydrogen Energy Storage The Principles of Hydrogen Energy StoragePerformance Characteristics; Applications of Hydrogen Energy Storage; 9 The Environmental Impact of Energy Storage Technologies; Technology-Specific Environmental Considerations; The Environmental Importance of Energy Storage; 10 The Cost and Economics of Energy Storage; Levelized Cost Model;