

1. Record Nr.	UNINA9910717413203321
Autore	Li Yong
Titolo	Stability Analysis, Flexible Control and Optimal Operation of Microgrid / / Yong Li, Mingmin Zhang, and Yijia Cao
Pubbl/distr/stampa	Singapore : , : Springer, , [2023] ©2023
ISBN	981-9907-53-5
Edizione	[First edition.]
Descrizione fisica	1 online resource (XV, 217 p. 137 illus., 129 illus. in color.)
Disciplina	621.31
Soggetti	Microgrids (Smart power grids)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Low-Frequency Oscillation Analysis of Virtual-Inertia-Controlled DC Microgrid Based on Multi-Timescale Impedance Model -- DC Voltage Supporting Strategy Utilizing Distributed Energy Storages in AC/DC Hybrid Networks -- Power Coordinated Control with Cross-Area Distributed Energy Storages in AC/DC Microgrid -- A Dynamic Coordinated Control Strategy of WTG-ES Combined System for Short-Term Frequency Support -- A Comprehensive Inertial Control Strategy for Hybrid AC/DC Microgrid with Distributed Generations -- A Robust Distributed Secondary Voltage Control Method for Islanded Microgrids -- Low-Carbon Economic Dispatch Considering Integrated Demand Response and Multistep Carbon Trading for Multi-Energy Microgrid -- Transaction Model Based on Stackelberg Game Method for Balancing Supply and Demand Sides of Multi-Energy Microgrid.
Sommario/riassunto	This book intends to report the new results of the microgrid in stability analysis, flexible control and optimal operation. The oscillatory stability issue of DC microgrid is explored and further solved. Flexible and stable voltage & frequency control of microgrid is put forward considering the distributed generations or distributed energy storages. The optimal operation of multi-energy is researched in view of economic efficiency and low-carbon development. The results of this book are original from authors who carry out the related research together for a long time, which is a comprehensive summary for authors' latest research results. The book is likely to be of interest to

university researchers, electrical engineers and graduate students in
power systems, power electronics, renewable energy and microgrid.
