1. Record Nr. UNINA9910299607503321 Autore Jiang Tao Titolo Energy Management of Internet Data Centers in Smart Grid / / by Tao Jiang, Liang Yu, Yang Cao Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, , 2015 **ISBN** 3-662-45676-1 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (112 p.) Collana Green Energy and Technology, , 1865-3529 Disciplina 621.319 Soggetti **Energy policy** Energy and state Power electronics Electrical engineering Signal processing Image processing Speech processing systems Mathematical optimization Energy Policy, Economics and Management Power Electronics, Electrical Machines and Networks Communications Engineering, Networks Signal, Image and Speech Processing Optimization Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. Nota di contenuto Introduction -- Energy Cost Minimization for Internet Data Centers Considering Power Outages -- Carbon-aware Energy Cost Minimization for Internet Data Centers -- Joint Workload and Battery Scheduling for Data Center Energy Cost Minimization -- Risk-constrained Operation for Internet Data Centers in Deregulated Electricity Markets --Conclusions. Sommario/riassunto This book reports the latest findings on intelligent energy management of Internet data centers in smart-grid environments. The book gathers

novel research ideas in Internet data center energy management,

especially scenarios with cyber-related vulnerabilities, power outages and carbon emission constraints. The book will be of interest to university researchers, R&D engineers and graduate students in communication and networking areas who wish to learn the core principles, methods, algorithms, and applications of energy management of Internet data centers in smart grids.