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Titolo	The green computing book : tackling energy efficiency at large scale / / edited by Wu-chun Feng, Virginia Polytechnic Institute and State University, Blacksburg, USA
Pubbl/distr/stampa	Boca Raton, [Florida] : , : CRC Press, , [2014] ©2014
ISBN	0-429-10432-4 1-4398-1987-4
Descrizione fisica	1 online resource (341 p.)
Collana	Chapman & Hall/CRC Computational Science Series
Classificazione	COM000000MAT021000TEC010000
Disciplina	628
Soggetti	Information technology - Environmental aspects Information technology - Energy consumption Computer systems - Energy conservation Green technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	A Chapman and Hall book.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Front Cover; Table of Contents; Preface; Contributors; CHAPTER 1: Low-Power, Massively Parallel, Energy-Efficient Supercomputers; CHAPTER 2: Compiler-Driven Energy Efficiency; CHAPTER 3: An Adaptive Run-Time System for Improving Energy Efficiency; CHAPTER 4: Energy-Efficient Multithreading through Run-Time Adaptation; CHAPTER 5: Exploring Trade-Offs between Energy Savings and Reliability in Storage Systems; CHAPTER 6: Cross-Layer Power Management; CHAPTER 7: Energy-Efficient Virtualized Systems; CHAPTER 9: Implications of Recent Trends in Performance, Costs, and Energy Use for Servers Back Cover
Sommario/riassunto	Driven by the newly placed importance and growing search for ways to make computing greener and more efficient, this reference is the first research-level book devoted to green computing and large-scale energy efficiency. With contributions from leading experts in the field, the book presents current research and developments in hardware, systems software, run-time systems, programming languages, data

center management, and applications. It also covers the emerging green movement in computing, including the Green Grid and the Green 500 list, as well as important programs in grassroots organizations and government agencies--
