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Nota di contenuto	Chapter 1. Electrical Power Systems: Evolution from Traditional Configuration to Distributed Generation and Microgrids -- Chapter 2. Renewable Energy Technologies for Microgrids -- Chapter 3. Smart Metering Technology -- Chapter 4. Control of Power Converters in AC Microgrids -- Chapter 5. Secondary control for islanded microgrids -- Chapter 6. Energy Management in Microgrids -- Chapter 7. Emerging control technologies and load management in microgrids -- Chapter 8. Procedures for Emergency Situations -- Chapter 9. Power Quality and Hosting Capacity in Islanding Microgrids -- Chapter 10. Stability issues in microgrids -- Chapter 11. Microgrid Protection Schemes -- Chapter 12. Design and Optimal Sizing of Microgrids -- Chapter 13. Electricity Markets and their Implications -- Chapter 14. Microgrid Demonstration Projects and Pilot Sites -- Chapter 15. DC Microgrids -- Chapter 16. Design and Implementation of Rural Microgrids -- Chapter 17. Emerging Smart Microgrid Power Systems: Philosophical Reflections --

	Chapter 18. Emerging Smart Microgrid Power Systems: Philosophical Relations.-.
Sommario/riassunto	This book addresses the emerging trend of smart grids in power systems. It discusses the advent of smart grids and selected technical implications; further, by combining the perspectives of researchers from Europe and South America, the book captures the status quo of and approaches to smart grids in a wide range of countries. It describes the basic concepts, enabling readers to understand the theoretical aspects behind smart grid formation, while also examining current challenges and philosophical discussions. Like the industrial revolution and the birth of the Internet, smart grids are certain to change the way people use electricity. In this regard, a new term – the “prosumer” – is used to describe consumers who may sometimes also be energy producers. This is particularly appealing if we bear in mind that most of the distributed power generation in smart grids does not involve carbon emissions.