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Nota di contenuto	Introduction -- Community Microgrid Features and Configurations -- Intelligent Power Electronic Converters and Control -- Distributed Generation -- Energy Storage Systems and Electric Vehicles -- Home Energy System -- Power Qualities and Stability -- Load Forecasting and Demand Response -- Fault Detection and Protection -- Monitoring, Communication and Control -- Microgrid Operation Optimization.
Sommario/riassunto	This book focuses on community energy and microgrids with details including system control, operation, optimization, as well as communication requirements. It provides insight into future community microgrids development for scholars/engineers in academic and industry communities with conceptual illustration, investigations, and examples in the changing energy landscape. The topics covered includes Basic understanding of community energy and microgrids; Overview of cutting-edge technologies in power converter control and

distributed power generation; Energy storage systems and electric vehicles in home energy systems; Demand response and fault protection with working principles; Monitoring, communication and control of a microgrid from a practical point of view, toward operational benefit optimization. This book can promote research in renewable energy and future smart grid and motivate the generation of new technologies to address the current challenges. The target audiences include scholars, researchers, students, lab technicians, engineers, managers in both academic and industry broader communities.