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Sommario/riassunto

This book explores the integration of artificial intelligence and clean energy technologies within next-generation smart grids, emphasizing their role as cyber-physical systems. It provides comprehensive insights into methods for grid-independent charging of electric vehicle batteries using solar energy, the design and control of microgrid systems, and hybrid storage systems. Additionally, the book examines the Internet of Everything's impact on various sectors, including smart healthcare and agriculture, and discusses the intelligent management of smart grid systems through machine learning models. The intended audience includes researchers, engineers, and professionals in the fields of energy, technology, and smart infrastructure.