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Nota di contenuto	1 -- Design of sustainable energy systems. 2.-Design and optimization of energy supply chains. 3 -- Integrated design of biorefineries. 4 -- Energy polygeneration systems. 5 -- Integrated oil and gas production. 6 -- Urban energy systems. 7 -- Production of biofuels. 8 -- Energy savings and energy efficiency in the process industries. 9 -- Energy planning and scheduling. 10 -- Optimal integration of renewable energies.
Sommario/riassunto	This book provides a scientific framework for integrated solutions to complex energy problems. It adopts a holistic, systems-based approach to demonstrate the potential of an energy systems engineering approach to systematically quantify different options at various levels of complexity (technology, plant, energy supply chain, mega-system). Utilizing modeling, simulation and optimization-based frameworks, along with a number of real-life applications, it focuses on advanced energy systems including energy supply chains, integrated biorefineries, energy planning and scheduling approaches and urban

energy systems. Featuring contributions from leading researchers in the field, this work is useful for academics, researchers, industry practitioners in energy systems engineering, and all those who are involved in model-based energy systems.
