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Autore	Bizon Nicu
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Collana	Green Energy and Technology, , 1865-3537
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Soggetti	Renewable energy sources Electric power production Power resources Materials Catalysis Force and energy Operations research Management science Renewable Energy Electrical Power Engineering Mechanical Power Engineering Natural Resource and Energy Economics Materials for Energy and Catalysis Operations Research, Management Science
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Nota di contenuto	Introduction -- Hybrid Power Systems -- Optimization Algorithms and Energy Management Strategies -- Global Extremum Seeking Algorithms -- Fuel Cell Net Power Maximization Strategies -- Fuel Economy Maximization Strategies -- Energy Harvesting From the Photovoltaic Systems Partially Shaded -- Mitigation of Energy Variability in Renewable Fuel Cell Hybrid Power Systems.
Sommario/riassunto	This book offers a comprehensive review of renewable energy sources

and optimization strategies in hybrid power systems (HPSs). It analyses the main issues and challenges in the renewable (REW) HPS field, particularly those using fuel cell (FC) systems as their main source of energy. It then offers innovative solutions to these issues, comparing them to solutions currently found in the literature. The book discusses optimization algorithms and energy management strategies. The focus is chiefly on FC net power maximization and fuel economy strategies based on global optimization. The last two chapters discuss energy harvesting from photovoltaic systems and how to mitigate energy variability in REW FC HPS. The main content is supplemented by numerous examples and simulations. Academics, students and practitioners in relevant industrial branches interested in REW HPS finds it of considerable interest, as a reference book or for building their own HPSs based on the examples provided.