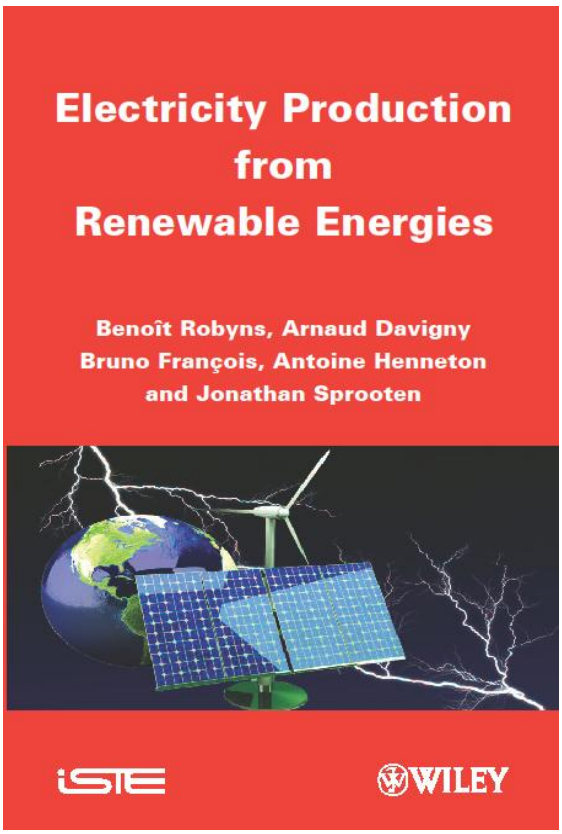

Electricity Production from Renewables Energies

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Description

Energy and environmental issues have caused a marked increase in electricity production from renewable energy sources since the beginning of the 21st Century. The concept of sustainable development and concern for future generations challenge us every day to produce new technologies for energy production, and new patterns of use for these energies. Their rapid emergence can make the understanding and therefore the perception of these new technologies difficult. This book aims to contribute to a better understanding of the new electricity generation technologies by addressing a diverse audience. It presents the issues, sources and means of conversion into electricity using a general approach and develops scientific concepts to understand their main technical characteristics.

Systems of electricity generation from renewable energy resources of small to medium powers are presented. The basic electrical concepts necessary for understanding the operating characteristics of these energy converters are introduced, and the constraints and problems of integration in the electrical networks of those means of production are discussed. Several exercises are provided to the reader for evaluation purposes.

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