DESCRIPTION

INTELLIGENT RENEWABLE ENERGY SYSTEMS

This collection of papers on artificial intelligence and other methods for improving renewable energy systems, written by industry experts, is a reflection of the state of the art, a must-have for engineers, maintenance personnel, students, and anyone else wanting to stay abreast with current energy systems concepts and technology.

Renewable energy is one of the most important subjects being studied, researched, and advanced in today's world. From a macro level, like the stabilization of the entire world's economy, to the micro level, like how you are going to heat or cool your home tonight, energy, specifically renewable energy, is on the forefront of the discussion.

This book illustrates modelling, simulation, design and control of renewable energy systems employed with recent artificial intelligence (AI) and optimization techniques for performance enhancement. Current renewable energy sources have less power conversion efficiency because of its intermittent and fluctuating behavior. Therefore, in this regard, the recent AI and optimization techniques are able to deal with data ambiguity, noise, imprecision, and nonlinear behavior of renewable energy sources more efficiently compared to classical soft computing techniques.
This book provides an extensive analysis of recent state of the art AI and optimization techniques applied to green energy systems. Subsequently, researchers, industry persons, undergraduate and graduate students involved in green energy will greatly benefit from this comprehensive volume, a must-have for any library.

**Audience**

Engineers, scientists, managers, researchers, students, and other professionals working in the field of renewable energy.

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## ABOUT THE AUTHOR

**Neeraj Priyadarshi, PhD**, works in the Department of Energy Technology, Aalborg University, Denmark, from which he also received a post doctorate. He received his M. Tech. degree in power electronics and drives in 2010 from the Vellore Institute of Technology (VIT), Vellore, India, and his PhD from the Government College of Technology and Engineering, Udaipur, Rajasthan, India. He has published over 60 papers in scientific and technical journals and conferences and has organized several international workshops. He is a reviewer for a number of technical journals, and he is the lead editor for four edited books, including Scrivener Publishing.

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