

Energy

Spring 2014 - Title Selection

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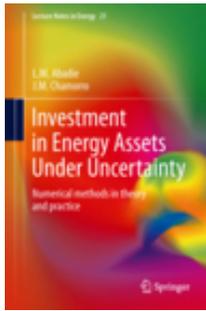
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Energy

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978-3-319-02704-3	Merkisz	New Trends in Emission Control in the European Union	
978-1-4614-8568-1	Watson	Geothermal Engineering	Fundamentals and Applications



L.M. Abadie, J.M. Chamorro

Investment in Energy Assets Under Uncertainty

Numerical methods in theory and practice

This book aims to provide a rigorous yet pragmatic approach to the valuation and management of investments in the energy sector. Time and uncertainty pervade most if not all issues relevant to energy assets. They run from the early stage of prototype and demonstration to the ultimate abandonment and decommissioning. Risk in particular appears in several areas; thus, one can distinguish technical risk from financial risk. Furthermore, the extent to which one can react to them is different (just think of price risk and regulation risk). Markets in general, and financial markets in particular, regularly put a price on a number of assets which differ in their return/risk characteristics.[...]

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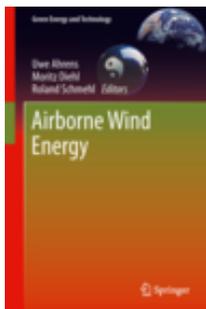
Hardcover

2013. XV, 187 p. 34 illus. (Lecture Notes in Energy, Band 21)

► **106,99 €**

ISBN 978-1-4471-5591-1

gewöhnlich versandfertig in 3-5 Werktagen



U. Ahrens, M. Diehl, R. Schmehl (Eds.)

Airborne Wind Energy

This reference offers an overview of the field of airborne wind energy. As the first book of its kind, it provides a consistent compilation of the fundamental theories, a compendium of current research and development activities as well as economic and regulatory aspects. In five parts, the book demonstrates the relevance of Airborne Wind Energy and the role that this emerging field of technology can play for the transition towards a renewable energy economy. Part I on "Fundamentals" contains seven general chapters explaining the principles of airborne wind energy and its different variants, of meteorology, the history

of kites and financing strategies. Part II on "System Modeling,[...]"

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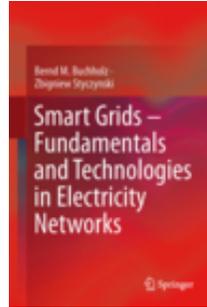
Hardcover

2013. XXIII, 611 p. 337 illus., 161 illus. in color. (Green Energy and Technology)

► **181,89 €**

ISBN 978-3-642-39964-0

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B.M. Buchholz, Z. Styczynski

Smart Grids – Fundamentals and Technologies in Electricity Networks

Efficient transmission and distribution of electricity is a fundamental requirement for sustainable development and prosperity. The world is facing great challenges regarding the reliable grid integration of renewable energy sources in the 21st century. The electric power systems of the future require fundamental innovations and enhancements to meet these challenges. The European Union's "Smart Grid" vision provides a first overview of the appropriate deep-paradigm changes in the transmission, distribution and supply of electricity. The book brings together common themes beginning with Smart Grids and the characteristics of new power plants based on renewable energy and /or highly[...]

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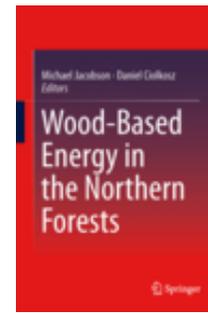
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2014. XVIII, 402 p. 346 illus., 23 illus. in color.

► **106,99 €**

ISBN 978-3-642-45119-5

Erscheinungstermin: March 31, 2014



M. Jacobson, D. Ciolkosz (Eds.)

Wood-Based Energy in the Northern Forests

This unique book provides the first comprehensive overview of wood based bioenergy in the northern hardwood forests of the Eastern United States. This includes a holistic look at the topic of wood based bioenergy, as well as focused analyses of key topics. This book is relevant to engineers, project developers, foresters, economists, sociologists, environmental scientists and natural resource managers. Most chapters also provide practical hands-on advice for the practitioner, and provide a valuable resource for anyone who is considering developing a woody bioenergy project.

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X. Liu, Y. Jiang, T. Zhang

Temperature and Humidity Independent Control (THIC) of Air-conditioning System

Temperature and Humidity Independent Control (THIC) of Air-conditioning System focuses on temperature and humidity independent control (THIC) systems, which represents a new concept and new approach for indoor environmental control. This book presents the main components of the THIC systems, including dehumidification devices, high-temperature cooling devices and indoor terminal devices. Other relevant issues, such as operation and control strategy and case studies, are also included. This book is intended for air-conditioning system designers and engineers as well as researchers working with indoor

environments. Xiaohua Liu is an associate professor at the Building Energy Research[...]

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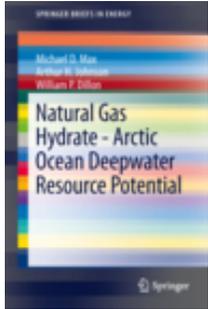
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M.D. Max, A.H. Johnson, W.P. Dillon

Natural Gas Hydrate - Arctic Ocean Deepwater Resource Potential

The book is an up-to-date basic reference for natural gas hydrate (NGH) in the Arctic Ocean. Geographical, geological, environmental, energy, new technology, and regulatory matters are discussed. The book should be of interest to general readers and scientists and students as well as industry and government agencies concerned with energy and ocean management. NGH is a solid crystalline material that compresses gas by about a factor of about 164 during crystallization from natural gas (mainly methane) - rich pore waters over time. NGH displaces water and may form large concentrations in sediment pore space. Its formation introduces changes in the geotechnical character of host sediment[...]

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J. Merkisz, J. Pielecha, S. Radzimirski

New Trends in Emission Control in the European Union

This book discusses recent changes in the European legislation for exhaust emissions from motor vehicles. It starts with a comprehensive explanation of both the structure and range of applicability of new regulations, such as Euro 5 and Euro 6 for light-duty vehicles and Euro VI for heavy-duty vehicles. Then it introduces the most important issues in in-service conformity and conformity of production for vehicles, describing the latest procedures for performing exhaust emissions tests under both bench and operating conditions. Subsequently, it reports on portable emission measurement systems (PEMS) and their application for assessing the emissions of gaseous and particulate matter[...]

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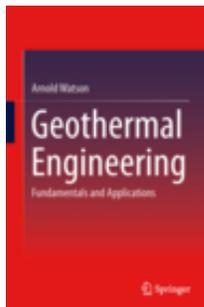
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► **106,99 €**

ISBN 978-3-319-02704-3

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A. Watson

Geothermal Engineering Fundamentals and Applications

This book explains the engineering required to bring geothermal resources into use. The book covers specifically engineering aspects that are unique to geothermal engineering, such as measurements in wells and their interpretation, transport of near-boiling water through long pipelines, turbines driven by fluids other than steam, and project economics. The explanations are reinforced by drawing comparisons with other energy industries.

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