Energy

April 2015 updated catalog

forthcoming, new and backlist book titles

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Energy

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Topics covered

Bio-Energies, Biofuels
Cogeneration, Heat Production, Coldness Production
Embedded Systems, Power Integration, Micro Batteries, Piezoelectricity, Nanotechnologies and Microsystems for Energy
Energy Demand, Scenarios, Regulations and Policies
Energy Efficiency, Combustion, Propulsion, Electric and Hybrid Vehicles
Energy Management in Buildings, Positive Energy Buildings
Energy Recovery, Thermoelectricity
Energy Storage, Batteries, Supercapacities, Hydrogen, Fuel Cells

Energy Transport, Energy Networks, SmartGrids
Fossil Energies, Geological Resources, Geothermal Energy, Strategic Metals
Nuclear Energy
Renewable Energy
Solar Energy Conversion, Photovoltaics, Concentrating Solar Energy, Solar Thermal
Wind Energy, Ocean Energies
Forthcoming Sets

Concentrated Solar Energy Conversion coordinated by Dollet Alain, Flamant Gilles
Energy Management in Embedded Systems coordinated by Maryline Chetto
Energy Storage – Batteries and Supercapacitors coordinated by Simon Patrice, Tarascon Jean-Marie
Nuclear Energy coordinated by Alain Dollet
Thermodynamics – Energy, Environment, Economy coordinated by Michel Feidt

Forthcoming Titles

Embodied Energy by Le Corre Olivier
Energy Harvesting by Adhikari Sondipon, Litak Grzegorz
Energy Harvesting with NEMS by Ardila Gustavo, Montes Laurent, Mouis Mireille
Energy Storage in Electric Power Grids
  by Robyns Benoît, François Bruno, Delille Gauthier, Saudemont Christophe
Intelligence in Energy by Kayakutlu Gülgün, Mercier-Laurent Eunika
Luminescence Based Techniques for Photovoltaic Devices by Lombez L
Thermochemical Conversion of Biomass for Energy and Chemicals Production by Dufour Anthony
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Sets – Forthcoming and published Titles

**Batteries / Electrochemical Storage**

Coordinated by Patrice Simon, Université Paul Sabatier, CIRIMAT-LCMIE and Jean-Marie Tarascon, Université de Picardie Jules Verne

Carbon-based or Pseudocapacitive Materials Supercapacitors by Brousse Thierry, Favier Frédéric, Simon Patrice
Electrochemical Energy Storage by Tarascon Jean-Marie, Simon Patrice
Electrodes Formulation by Lestriez Bernard, Morcrette Mathieu
Inorganic Batteries: 2D thin systems to 3D massive batteries by Viallet Virginie, Dollé Mickael, Bouchet Renaud
Materials and Understanding of Mechanisms for More Efficient Li-ion Battery Electrodes
  by Croguennec Laurence, Monconduit Laure, Dedryvère Rémi
Multi-scale Modeling of Batteries and Supercapacitors
  by Franco Alejandro, Salanne Mathieu, Doublet Marie-Liesse
Multifunctional Electrodes Combining Conversion and Energy Storage for Photo-rechargeable Batteries by Laberty-Robert Christel, Sauvage Frédéric
New chemistries, beyond Li-ion by Tarascon Jean-Marie, Barboux Philippe, Palacin Rosa
Operando, In-situ and Ex-situ by Ménétrier Michel, Masquelier Christian, Stievano Lorenzo
Organic Redox Materials for Electrochemical Storage by Leprêtre Jean-Claude, Poizot Philippe, Dolhem Franck

**Energy Management in Embedded Systems**

Coordinated by Maryline Chetto, Nantes University

Energy Autonomy of Real-Time Systems by Chetto Maryline, Queudet Audrey
Energy Powering of Battery-Free Wireless Embedded Systems by Dilhac Jean-Marie, Boitier Vincent
ESD Protection Methodologies by Bafleur Marise, Caignet Fabrice, Nolhier Nicolas
Flash Memory Integration by Boukhobza Jalil, Olivier Pierre
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Published Titles

Electrochemical Energy Storage
Volume 1 of the Energy Storage – Batteries and Supercapacitors set
Cordinated by Jean-Marie Tarascon, Collège de France, Paris, Patrice Simon, University Paul Sabatier, Toulouse, France

Energy Storage – Batteries and Supercapacitors set
ISBN: 9781848217201 • 2015 • 94 pages • USD 70.00 • ISTE-WILEY

Contents
2. Advanced Li-ion.
3. Capacitive Storage.
4. New Chemistries.
5. Eco-Compatible Storage.
7. Technology Transfer, Research Promotion and Education.

Le stockage électrochimique de l’énergie – ISBN: 9781784050665
The above title is published in French by ISTE Editions (www.iste-editions.fr)

Energy Geostructures
Innovation in Underground Engineering
Lyesse Laloui and Alice Di Donna, Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland

Coordinated by Gilles Pijaudier-Cabot

Energy geostructures are a tremendous innovation in the field of foundation engineering and are spreading rapidly throughout the world. They allow the procurement of a renewable and clean source of energy which can be used for heating and cooling buildings. This technology couples the structural role of geostructures with the energy supply, using the principle of shallow geothermal energy.

Energy Geostructures provides a sound basis in the challenging area of energy geostructures. The objective of this book is to supply the reader with an exhaustive overview on the most up-to-date and available knowledge of these structures. It details the procedures that are currently being applied in the regions where geostructures are being implemented.

ISBN: 9781848215726 • 2013 • 320 pages • USD 145.00 • ISTE-WILEY

Contents
Part 1. Physical Modeling of Energy Piles at Different Scales
1. Soil Response under Thermomechanical Conditions Imposed by Energy Geostructures.
2. Full-scale In Situ Testing of Energy Piles.
Part 3. Engineering Practice
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Published Titles

Solar Energy at Urban Scale
Edited by Benoit Beckers, University of Technology of Compiègne, France

Energy Series

ISBN: 9781848213562 • 2012 • 384 pages • USD 165.00 • ISTE-WILEY
This book collects the points of view of 18 specialists from around the world and proposes a multi-disciplinary and systematic approach concerning specialties as different as meteorology, geography, architecture and urban engineering systems, all surrounding the essential problem of solar radiation.

Contents
2. Territorial and Urban Measurements.
7. Evapotranspiration.
12. Dense Cities in the Tropical Zone.

Marine Renewable Energy Handbook
Edited by Bernard Multon, ENS de Cachan - Rennes, France

Energy Series

ISBN: 9781848213326 • 2012 • 672 pages • USD 277.00 • ISTE-WILEY
This multidisciplinary book deals with general aspects such as the specificities and constraints of the marine environment, the concepts of hydrodynamics and ocean engineering, as well as the industrial and economic sides necessary for the assembly of projects.

Contents
1. Marine Environment and Energy Resources.
2. Constraints of the Marine Environment.
5. Installation of Wind Turbines at Sea.
7. Production of Tidal Range Energy.
10. Feedback from the Sabella Tidal Current Turbine Project.
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