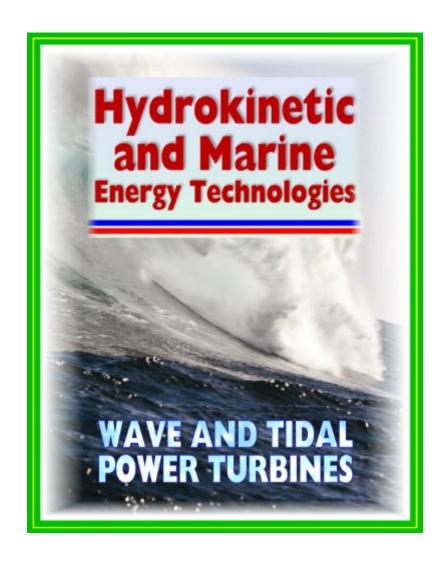
The book was found

21st Century Guide To Hydrokinetic, Tidal, Ocean Wave Energy Technologies - Concepts, Designs, Environmental Impact





Synopsis

This ebook provides comprehensive coverage of hydrokinetic energy - power derived from moving water, including wave, marine, and tidal plants. While traditional hydropower is a well-established industry, advanced water power technologies that produce electricity from moving water without the use of a dam are now emerging in the renewable energy sector. These technologies, known as hydrokinetics, generate electricity from the motion of waves, the free flow of tides, ocean currents, or inland waterways. As part of its broad effort to advance the renewable energy industry, the U.S. Department of Energy (DOE) is funding various market acceleration projects designed to address key issues associated with hydrokinetic technologies that harness renewable energy from the nation's oceans and rivers. Hydrokinetic energy conversion devices are designed to be deployed in a stream or current, capturing kinetic energy from the flow of water across or through the rotor (which may take various forms) to power a generator without impounding or diverting the flow of the water resource. Conceptually, this is similar to the way wind energy conversion devices work. Wave energy conversion devices create a system of reacting forces, in which two or more bodies move relative to each other, while at least one body interacts with the waves. The body moved by the waves is called the displacer, while the body that reacts to the displacer is called the reactor. There are many ways that such a system may be configured, including: oscillating water columns (OWC), point-absorbers, attenuators, and overtopping devices. Setting for these various technologies include natural streams, tidal estuaries, near-shore environments, offshore and ocean locations, and constructed waterways. Technologies covered include wave energy conversion devices, terminators, oscillating water columns, point absorbers, attenuators, overtopping devices, in-stream tidal flow energy conversion devices (TISECs), horizontal axis, vertical axis, axial flow machines, open center turbines, ducted turbines, turbine matrix, helical turbines, heave wave devices, heave-surge wave devices, overtopping wave devices, and more. Contents include a thorough review of the potential environmental effects of marine and hydrokinetic energy technologies. This is a privately authored news service and educational publication of Progressive Management. Our publications synthesize official government information with original material - they are not produced by the federal government. They are designed to provide a convenient user-friendly reference work to uniformly present authoritative knowledge that can be rapidly read, reviewed or searched. Vast archives of important data that might otherwise remain inaccessible are available for instant review no matter where you are. This e-book format makes a great reference work and educational tool. There is no other reference book that is as convenient, comprehensive, thoroughly researched, and portable - everything you need to know, from renowned experts you trust. For over a quarter of a

century, our news, educational, technical, scientific, and medical publications have made unique and valuable references accessible to all people. Our e-books put knowledge at your fingertips, and an expert in your pocket!

Book Information

File Size: 480 KB

Print Length: 151 pages

Simultaneous Device Usage: Unlimited

Publisher: Progressive Management (November 3, 2010)

Publication Date: November 3, 2010

Sold by: A Digital Services LLC

Language: English

ASIN: B004APA5R4

Text-to-Speech: Enabled

X-Ray: Not Enabled

Word Wise: Not Enabled

Lending: Enabled

Enhanced Typesetting: Enabled

Best Sellers Rank: #1,728,404 Paid in Kindle Store (See Top 100 Paid in Kindle Store) #22 in Kindle Store > Kindle eBooks > Engineering & Transportation > Engineering > Civil > Hydrology #50 in Books > Engineering & Transportation > Engineering > Energy Production & Extraction > Alternative & Renewable > Hydroelectric #699 in Books > Engineering & Transportation > Engineering > Energy Production & Extraction > Engineering > Energy Production & Extraction > Electric

Customer Reviews

Very in depth and specific

Download to continue reading...

21st Century Guide to Hydrokinetic, Tidal, Ocean Wave Energy Technologies - Concepts, Designs, Environmental Impact Energy, Utility, Transportation and Environmental Law for the 21st Century: A Collection Roget's 21st Century Thesaurus, Third Edition (21st Century Reference) The Lodge Officer's Handbook: For the 21st Century Masonic Officer (Tools for the 21st Century Mason) (Volume 2) Reiki: The Healing Energy of Reiki - Beginner's Guide for Reiki Energy and Spiritual Healing: Reiki: Easy and Simple Energy Healing Techniques Using the ... Energy Healing for Beginners Book 1) Meaningful Metrics: A 21st Century Librarian's Guide to Bibliometrics, Altmetrics,

and Research Impact Energy: Physical, Environmental, and Social Impact (3rd Edition) Freedom for the Seas in the Twenty-First Century: Ocean Goverance and Environmental Harmony Water Wave Mechanics for Engineers and Scientists: 2 (Advanced Series on Ocean Engineering) Water Wave Mechanics for Engineers & Scientists (Advanced Series on Ocean Engineering-Vol2) (v. 2) The Wave Watcher's Companion: From Ocean Waves to Light Waves via Shock Waves, Stadium Waves, and All the Rest of Life's Undulations 21st Century Guide to Hydraulic Fracturing, Underground Injection, Fracking, Hydrofrac, Marcellus Shale Natural Gas Production Controversy, Environmental and Safety Risks, Water Pollution The Analysis of Tidal Stream Power Tidal Shift Millimeter Wave Wireless Communications (Prentice Hall Communications Engineering and Emerging Technologies Series from Ted Rappaport) Coastal and Estuarine Processes (Advanced Series on Ocean Engineering) (Advanced Series on Ocean Engineering (Paperback)) Random Seas and Design of Maritime Structures (Ocean Engineering) (Advanced Series on Ocean Engineering (Paperback)) Big Blow: A Tale From Ocean City (Ocean City Mysteries Book 3) Oceanography in the Tongue of the Ocean, Bahamas, B.W.I.: a report on oceanographic observations in the Tongue of the Ocean between Fresh Creek, Andros and the western end of New Providence The Sago Palm: The Food and Environmental Challenges of the 21st Century

<u>Dmca</u>