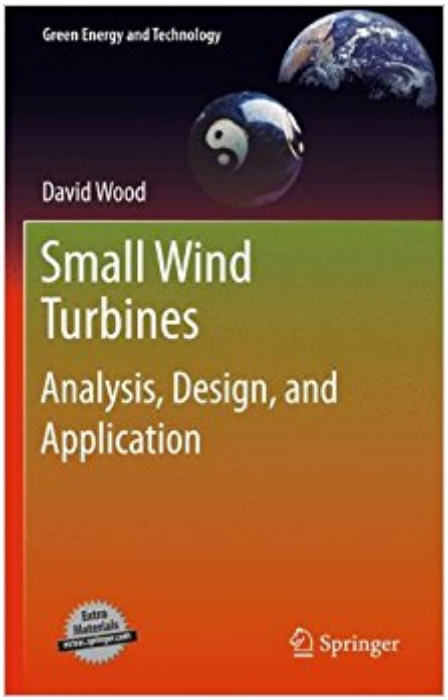
Small Wind Turbines: Analysis, Design, And Application (Green Energy And Technology)



Synopsis

Small Wind Turbines provides a thorough grounding in analysing, designing, building, and installing a small wind turbine. Small turbines are introduced by emphasising their differences from large ones and nearly all the analysis and design examples refer to small turbines.The accompanying software includes MATLABÂ® programs for power production and starting performance, as well as programs for detailed multi-objective optimisation of blade design. A spreadsheet is also given to help readers apply the simple load model of the IEC standard for small wind turbine safety. Small Wind Turbines represents the distilled outcome of over twenty years experience in fundamental research, design and installation, and field testing of small wind turbines.Small Wind Turbines is a suitable reference for student projects and detailed design studies, and also provides important background material for engineers and others using small wind turbines for remote power and distributed generation applications.

Book Information

Series: Green Energy and Technology

Hardcover: 272 pages

Publisher: Springer; 2011 edition (July 25, 2011)

Language: English

ISBN-10: 1849961743

ISBN-13: 978-1849961745

Product Dimensions: 6.2 x 0.8 x 9.2 inches

Shipping Weight: 1.2 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #2,405,171 in Books (See Top 100 in Books) #87 inÂ Books > Engineering & Transportation > Engineering > Energy Production & Extraction > Alternative & Renewable > Wind #345 inÂ Books > Engineering & Transportation > Engineering > Energy Production & Extraction > Power Systems #364 inÂ Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electric Machinery & Motors

Customer Reviews

Small Wind Turbines provides a thorough grounding in analysing, designing, building, and installing a small wind turbine. Small turbines are introduced by emphasising their differences from large ones and nearly all the analysis and design examples refer to small turbines.The accompanying software includes MATLABÂ® programs for power production and starting performance, as well as programs

for detailed multi-objective optimisation of blade design. A spreadsheet is also given to help readers apply the simple load model of the IEC standard for small wind turbine safety. Small Wind Turbines represents the distilled outcome of over twenty years experience in fundamental research, design and installation, and field testing of small wind turbines.Small Wind Turbines is a suitable reference for student projects and detailed design studies, and also provides important background material for engineers and others using small wind turbines for remote power and distributed generation applications.

David Wood has Bachelors' and Masters' degrees in Mechanical Engineering from Sydney University and a PhD in Aeronautics from Imperial College, London, UK. He has been Senior Research Associate at NASA Ames Research Centre in California and has spent many years in the Faculty of Engineering at Newcastle University, where he was instrumental in developing a research group in small wind turbine technology. Dr Wood was the Australian representative on the international committee that recently revised the International Electrotechnical Commission safety standard for small wind turbines.Â In 2006 he left the University of Newcastle to start Aerogenesis Australia, a small company building small wind turbines.Â In February 2010 he was appointed to the Enmax/Schulich Chair of Renewable Energy at the University of Calgary. He is the editor for small turbines and aerodynamics for the journal Wind Engineering and has authored and co-authored over 120 refereed journal and conference papers in these areas.Â He holds patents on blade and controller design.

Wind Energy Explained: Theory, Design and Application 2nd (second) Edition by Manwell, James F., McGowan, Jon G., Rogers, Anthony L. [2010] Energy Harvesting: Solar, Wind, and Ocean Energy Conversion Systems (Energy, Power Electronics, and Machines) Renewable Energy Made Easy: Free Energy from Solar, Wind, Hydropower, and Other Alternative Energy Sources Green Smoothie Recipe Book: 500 Delicious Green Smoothie Recipes for Weight Loss, Better Health, Energy & Cleansing (Green Smoothies, Nutribullet Recipe ... Juicing Recipes, Fat Loss, Cleanse, Detox) Reiki: The Healing Energy of Reiki - Beginnerâ ™s Guide for Reiki Energy and Spiritual Healing: Reiki: Easy and Simple Energy Healing Techniques Using the ... Energy Healing for Beginners Book 1) Pesticide Application Log (Logbook, Journal - 96 pages, 5 x 8 inches): Pesticide Application Logbook (Deep Wine Cover, Small) (Unique Logbook/Record Books) Off-Grid Living: How To Build Wind Turbine, Solar Panels And Micro Hydroelectric Generator To Power Up Your House: (Wind Power, Hydropower, Solar Energy, Power Generation) Wind Energy for the Rest of Us: A Comprehensive Guide to Wind Power and How to Use It