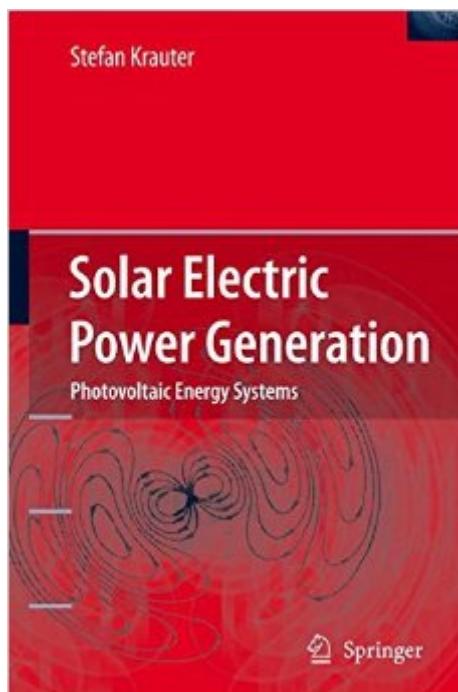


The book was found

Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling Of Optical And Thermal Performance, Electrical Yield, Energy Balance, Effect On Reduction Of Greenhouse Gas Emissions



Synopsis

This book thoroughly examines the technical parameters of photovoltaic systems, and appraises their net energy balance from production, operation and maintenance, to recycling. Similar performance and yield analysis is applied to optical, thermal, and electrical parameters and interfaces. Professor Krauter demonstrates how accurate yield calculations, optimal system performance, and new prototypes aid in cost reduction. Examples, tables and figures are included.

Book Information

Hardcover: 217 pages

Publisher: Springer; 2006 edition (June 2, 2006)

Language: English

ISBN-10: 3540313451

ISBN-13: 978-1850755265

Product Dimensions: 9.2 x 0.7 x 6.1 inches

Shipping Weight: 1.3 pounds (View shipping rates and policies)

Average Customer Review: 4.5 out of 5 starsÂ See all reviewsÂ (2 customer reviews)

Best Sellers Rank: #453,836 in Books (See Top 100 in Books) #40 inÂ Books > Engineering & Transportation > Engineering > Industrial, Manufacturing & Operational Systems > Economics #41 inÂ Books > Engineering & Transportation > Engineering > Energy Production & Extraction > Power Systems #51 inÂ Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electric Machinery & Motors

Customer Reviews

This book explores the real potential of solar electric power generation in order to reduce CO2 emissions and prevent the planet from global warming. For this purpose the author analyses the entire energy balance of photovoltaic power plants during their life time from the production to the recycling - taking into account the whole system. He considers all optical interfaces and layers passed by the sunlight from the sun into the solar cell, thermal layout of any photovoltaic module and its heat transfer mechanisms, its related actual electrical properties, allowing an accurate calculation of yield and an optimization of system components, thus reducing costs for solar electricity. Different locations for production and installation of photovoltaic systems are also considered. The concluding message is: If applied in an intelligent way, global energy supply via photo-electric power generation is widely possible.

Finally someone wrote a book that also treats the interface from the solar cell to the operating conditions in a real environment. Very nice are also the LCAs (including energy (and CO2) payback via recycling) for different sites of application.

[Download to continue reading...](#)

Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions
Greenhouse: Greenhouse Construction & Gardening Box Set (Greenhouse, Greenhouse Management, Greenhouse Growing, Greenhouse Plans, Greenhouse Gardening, Greenhouse Gardening for Beginner) Greenhouse: Greenhouse Gardening Box Set (Greenhouse, Greenhouse Gardening, Greenhouse Gardening for Beginners, Greenhouse for Dummies, Garden, Gardening)
Solar Electricity Handbook - 2012 Edition: A Simple Practical Guide to Solar Energy - Designing and Installing Photovoltaic Solar Electric Systems
Solar Electricity Handbook - 2013 Edition: A Simple Practical Guide to Solar Energy - Designing and Installing Photovoltaic Solar Electric Systems
Solar Power: How to Save A LOT of Money the Easy Way (Solar Power, Save Money, Solar Energy, Solar, Sustainable Energy, Sustainable Homes, Sustainability)
Solar Power: Proven Lessons How to Build Your Own Affordable Solar Power System: (Energy Independence, Lower Bills & Off Grid Living) (Self Reliance, Solar Energy)
Solar PV Off-Grid Power: How to Build Solar PV Energy Systems for Stand Alone LED Lighting, Cameras, Electronics, Communication, and Remote Site
Home Power Systems
Greenhouse Gardening: Secrets of Building a Perfect Greenhouse, Tips for Growing Vegetables and Flowers All Year Round! (Homesteading & Greenhouse Gardening)
Greenhouse Gardening: How To Effectively Grow Fruits, Vegetables, And Plants All Year In A Greenhouse Efficiently (Gardening, Planting, Companion Gardening, Gardening Guide, Greenhouse Gardening)
Solar Electricity Handbook - 2015 Edition: A simple, practical guide to solar energy - designing and installing solar PV systems.
High-Yield® Cell and Molecular Biology (High-Yield Series)
High-yield Neuroanatomy (High-yield Series) 4th (fourth) Edition by James D. Fix, Jennifer Brueckner published by Lippincott Williams and Wilkins (2008)
By James D. Fix: High-Yield Neuroanatomy (High-Yield Series) Third (3rd) Edition
El ABC de las instalaciones electricas en sistemas eolicos y fotovoltaicos / The ABC of electrical installations in wind and photovoltaic systems (Spanish Edition)
Gut: Gut Balance Solution: 10 Steps on How You Can Restore Optimal Gut Health, Boost Metabolism and Heal Your Gut Effectively (4-Week Gut Balance Diet Plan, leaky gut, clean gut, Gut Balance Recipes)
Cooking Under Pressure -The Ultimate Electric Pressure Recipe Cookbook and Guide for Electric Pressure Cookers.: New 2016 Edition - Now Contains 250 Electric Pressure Cooker Recipes. The Clutterfly Effect - Tweak Your Way to

Total Transformation by decluttering your life: How small steps can yield big results. Planning and Installing Solar Thermal Systems: A Guide for Installers, Architects and Engineers DIY: How to make solar cell panels easily with no experience!: Master Making Solar Panels Faster! (Master Solar Faster Book 1)

[Dmca](#)