



# Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions

By Stefan C.W. Krauter

Download now

Read Online 

**Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions** By Stefan C.W. Krauter

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.

 [Download Solar Electric Power Generation - Photovoltaic Ene ...pdf](#)

 [Read Online Solar Electric Power Generation - Photovoltaic E ...pdf](#)

# **Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions**

*By Stefan C.W. Krauter*

**Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions** By Stefan C.W. Krauter

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.

**Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions** By Stefan C.W. Krauter **Bibliography**

- Sales Rank: #1807359 in Books
- Published on: 2006-06-02
- Original language: English
- Number of items: 1
- Dimensions: 6.14" h x .69" w x 9.21" l, 1.30 pounds
- Binding: Hardcover
- 217 pages

 [Download Solar Electric Power Generation - Photovoltaic Ene ...pdf](#)

 [Read Online Solar Electric Power Generation - Photovoltaic E ...pdf](#)

**Download and Read Free Online Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions By Stefan C.W. Krauter**

---

## **Editorial Review**

From the Back Cover

Solar electricity is an economically viable, environmentally sustainable alternative to the world's energy supplies. In support, Dr. Krauter thoroughly examines the various technical parameters of photovoltaic systems. Study of performance and yield (including optical, thermal, and electrical parameters and interfaces) are analyzed. The net energy balance of photovoltaic systems – from production, operation and maintenance, to recycling – is explored. Professor Krauter demonstrates how the importance of accurate yield calculations, optimal system performance, and new prototypes aid in cost reductions. The potential of solar electric power generation as a means to significantly reduce CO<sub>2</sub> emissions is also detailed. In addition, various locations for the production and installation of photovoltaic power plants are considered – with surprising results. Examples, tables and figures are included.

About the Author

1963: Born in Goeppingen, Germany.

1988: Master in Electrical Engineering and Cybernetics at University of Technology Munich, Germany.

1992: Co-Founder of the International Solar Center Berlin.

1993: Ph.D. (Operation model of PV modules) at Prof. Rolf Hanitsch, University of Technology Berlin, Faculty of Electrical Engineering, Germany

1994: Post-doc studies at Prof. Martin Green the University of New South Wales.

1995: Visiting professor at the Federal University of Rio de Janeiro, Brazil

1996: Winner of Berlin Solar price

1997: Co-founder of the Solon AG, joint-stock company for PV module production, Berlin

2002: Organizer and general chairman of RIO 02 – World Climate & Energy Event (continuation of that event in 2003, 2005 and 2006, since 2003 together with Latin America Renewable Energy Fair - LAREF)

Chairman at the World Council for Renewable Energies (WCRE) - Latin America Section

2003: Visiting Professor at the State University of Ceará, Brazil.

2004: Member of the Board of Directors of the International Solar Energy Society (ISES)

2005 Professor at University of Technology Berlin

## **Users Review**

### **From reader reviews:**

#### **Howard Kincaid:**

What do you consider book? It is just for students as they are still students or this for all people in the world, what best subject for that? Just you can be answered for that question above. Every person has various personality and hobby per other. Don't to be pushed someone or something that they don't desire do that. You must know how great in addition to important the book Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions. All type of book would you see on many options. You can look for the internet sources or other social media.

#### **Oscar Jackson:**

The knowledge that you get from Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions is the more deep you looking the information that hide inside the words the more you get thinking about reading it. It doesn't mean that this book is hard to understand but Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions giving you thrill feeling of reading. The author conveys their point in selected way that can be understood simply by anyone who read this because the author of this book is well-known enough. That book also makes your own personal vocabulary increase well. Therefore it is easy to understand then can go along, both in printed or e-book style are available. We propose you for having this kind of Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions instantly.

#### **Christopher Bohner:**

Reading a publication tends to be new life style within this era globalization. With studying you can get a lot of information which will give you benefit in your life. With book everyone in this world can share their idea. Ebooks can also inspire a lot of people. Many author can inspire their very own reader with their story or even their experience. Not only the storyplot that share in the guides. But also they write about the data about something that you need example of this. How to get the good score toefl, or how to teach your sons or daughters, there are many kinds of book that you can get now. The authors these days always try to improve their proficiency in writing, they also doing some study before they write on their book. One of them is this Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions.

#### **Joel Padilla:**

This Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions is great

guide for you because the content that is full of information for you who else always deal with world and get to make decision every minute. That book reveal it data accurately using great plan word or we can claim no rambling sentences inside it. So if you are read it hurriedly you can have whole details in it. Doesn't mean it only provides straight forward sentences but tough core information with lovely delivering sentences.

Having Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions in your hand like having the world in your arm, data in it is not ridiculous one particular. We can say that no e-book that offer you world inside ten or fifteen second right but this e-book already do that. So , this can be good reading book. Hey there Mr. and Mrs. busy do you still doubt that will?

**Download and Read Online Solar Electric Power Generation -  
Photovoltaic Energy Systems: Modeling of Optical and Thermal  
Performance, Electrical Yield, Energy Balance, Effect on Reduction  
of Greenhouse Gas Emissions By Stefan C.W. Krauter  
#A9TXE6WH0J1**

# **Read Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions By Stefan C.W. Krauter for online ebook**

Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions By Stefan C.W. Krauter Free PDF download, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions By Stefan C.W. Krauter books to read online.

## **Online Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions By Stefan C.W. Krauter ebook PDF download**

**Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions By Stefan C.W. Krauter Doc**

Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions By Stefan C.W. Krauter Mobipocket

Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions By Stefan C.W. Krauter EPub

A9TXE6WH0J1: Solar Electric Power Generation - Photovoltaic Energy Systems: Modeling of Optical and Thermal Performance, Electrical Yield, Energy Balance, Effect on Reduction of Greenhouse Gas Emissions By Stefan C.W. Krauter