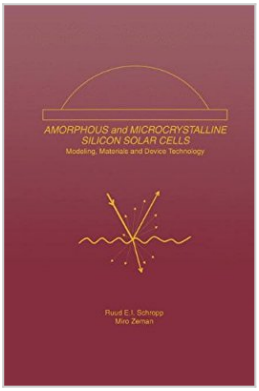

Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology (Electronic Materials: Science & Technology)

By Ruud E.I. Schropp, Miro Zeman

Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology (Electronic Materials: Science & Technology) By Ruud E.I. Schropp, Miro Zeman

Amorphous silicon solar cell technology has evolved considerably since the first amorphous silicon solar cells were made at RCA Laboratories in 1974. Scien tists working in a number of laboratories worldwide have developed improved alloys based on hydrogenated amorphous silicon and microcrystalline silicon. Other scientists have developed new methods for growing these thin films while yet others have developed new photovoltaic (PV) device structures with im proved conversion efficiencies. In the last two years, several companies have constructed multi-megawatt manufacturing plants that can produce large-area, multijunction amorphous silicon PV modules. A growing number of people be lieve that thin-film photovoltaics will be integrated into buildings on a large scale in the next few decades and will be able to make a major contribution to the world's energy needs. In this book, Ruud E. I. Schropp and Miro Zeman provide an authoritative overview of the current status of thin film solar cells based on amorphous and microcrystalline silicon. They review the significant developments that have occurred during the evolution of the technology and also discuss the most im portant recent innovations in the deposition of the materials, the understanding of the physics, and the fabrication and modeling of the devices.

Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology (Electronic Materials: Science & Technology)

By Ruud E.I. Schropp, Miro Zeman

Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology (Electronic Materials: Science & Technology) By Ruud E.I. Schropp, Miro Zeman

Amorphous silicon solar cell technology has evolved considerably since the first amorphous silicon solar cells were made at RCA Laboratories in 1974. Scien tists working in a number of laboratories worldwide have developed improved alloys based on hydrogenated amorphous silicon and microcrystalline silicon. Other scientists have developed new methods for growing these thin films while yet others have developed new photovoltaic (PV) device structures with im proved conversion efficiencies. In the last two years, several companies have constructed multi-megawatt manufacturing plants that can produce large-area, multijunction amorphous silicon PV modules. A growing number of people be lieve that thin-film photovoltaics will be integrated into buildings on a large scale in the next few decades and will be able to make a major contribution to the world's energy needs. In this book, Ruud E. I. Schropp and Miro Zeman provide an authoritative overview of the current status of thin film solar cells based on amorphous and microcrystalline silicon. They review the significant developments that have occurred during the evolution of the technology and also discuss the most im portant recent innovations in the deposition of the materials, the understanding of the physics, and the fabrication and modeling of the devices.

Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology (Electronic Materials: Science & Technology) By Ruud E.I. Schropp, Miro Zeman Bibliography

- Sales Rank: #7122888 in Books
- Brand: Brand: Springer
- Published on: 1998-10-31
- Original language: English
- Number of items: 1
- Dimensions: 9.21" h x .56" w x 6.14" l, 1.11 pounds
- Binding: Hardcover
- 207 pages

Editorial Review

Users Review

From reader reviews:

Paul Andrews:

Do you have favorite book? In case you have, what is your favorite's book? E-book is very important thing for us to learn everything in the world. Each publication has different aim or perhaps goal; it means that publication has different type. Some people truly feel enjoy to spend their time for you to read a book. These are reading whatever they consider because their hobby is definitely reading a book. Why not the person who don't like looking at a book? Sometime, individual feel need book whenever they found difficult problem or maybe exercise. Well, probably you should have this Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology (Electronic Materials: Science & Technology).

Arlene Farrar:

This Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology (Electronic Materials: Science & Technology) tend to be reliable for you who want to be described as a successful person, why. The explanation of this Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology (Electronic Materials: Science & Technology) can be one of the great books you must have is giving you more than just simple reading through food but feed a person with information that maybe will shock your before knowledge. This book is usually handy, you can bring it almost everywhere and whenever your conditions both in e-book and printed ones. Beside that this Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology (Electronic Materials: Science & Technology) giving you an enormous of experience for example rich vocabulary, giving you trial of critical thinking that we all know it useful in your day activity. So , let's have it appreciate reading.

Donna Graham:

You are able to spend your free time to learn this book this guide. This Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology (Electronic Materials: Science & Technology) is simple to create you can read it in the area, in the beach, train in addition to soon. If you did not include much space to bring the particular printed book, you can buy the e-book. It is make you much easier to read it. You can save the actual book in your smart phone. And so there are a lot of benefits that you will get when you buy this book.

Marc Medina:

Don't be worry if you are afraid that this book will filled the space in your house, you can have it in e-book means, more simple and reachable. This particular Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology (Electronic Materials: Science & Technology) can give you a lot of buddies because by you looking at this one book you have issue that they don't and make an individual more like an interesting person. This specific book can be one of one step for you to get success. This guide offer you information that perhaps your friend doesn't realize, by knowing more than additional make you to be great persons. So , why hesitate? Let me have Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology (Electronic Materials: Science & Technology).

Read Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology (Electronic Materials: Science & Technology) By Ruud E.I. Schropp, Miro Zeman for online ebook

Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology (Electronic Materials: Science & Technology) By Ruud E.I. Schropp, Miro Zeman Free PDF d0wnl0ad, 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 Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology (Electronic Materials: Science & Technology) By Ruud E.I. Schropp, Miro Zeman books to read online.

Online Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology (Electronic Materials: Science & Technology) By Ruud E.I. Schropp, Miro Zeman ebook PDF download

Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology (Electronic Materials: Science & Technology) By Ruud E.I. Schropp, Miro Zeman Doc

Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology (Electronic Materials: Science & Technology) By Ruud E.I. Schropp, Miro Zeman Mobipocket

Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology (Electronic Materials: Science & Technology) By Ruud E.I. Schropp, Miro Zeman EPub

WTPGVMO3LZF: Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology (Electronic Materials: Science & Technology) By Ruud E.I. Schropp, Miro Zeman