



Materials Concepts for Solar Cells (Energy Futures)

Thomas Dittrich

Download now

[Click here](#) if your download doesn't start automatically

Materials Concepts for Solar Cells (Energy Futures)

Thomas Dittrich

Materials Concepts for Solar Cells (Energy Futures) Thomas Dittrich

This textbook bridges the gap between basic literature on the physics of solar cells and highly specialized books about photovoltaic solar energy conversion. It is intended to give students with a background in engineering, materials science, chemistry or physics a comprehensive introduction to materials concepts for solar cells. To this end, general principles of solar cells and materials demands are explained in the first part of this book. The second part is devoted to the four classes of materials concepts for solar cells: solar cells based on crystals of silicon, epitaxial layer systems of III-V semiconductors, thin-film absorbers on foreign substrates, and nano-composite absorbers.

Request Inspection Copy

Contents:

- **Basics of Solar Cells and Materials Demands:**

- Basic Characteristics and Characterization of Solar Cells
- Photocurrent Generation and the Origin of Photovoltage
- Influence of Recombination on the Minimum Lifetime
- Charge Separation Across p-n Junctions
- Ohmic Contacts for Solar Cells
- Maximum Energy Conversion Efficiency of Solar Cells

- **Materials Specific Concepts:**

- Solar Cells Based on Crystalline Silicon
- Solar Cells Based on III-V Semiconductors
- Thin-Film Solar Cells
- Nano-Composite Solar Cells

- Appendix A: Solutions to Tasks

Readership: Advanced undergraduates and graduate students in photovoltaics.

Key Features:

- Several case studies on insurgency included in this book
- Discusses the prevention of and responses to acts of terrorism and insurgency



[Download Materials Concepts for Solar Cells \(Energy Futures ...pdf](#)



[Read Online Materials Concepts for Solar Cells \(Energy Futur ...pdf](#)

Download and Read Free Online Materials Concepts for Solar Cells (Energy Futures) Thomas Dittrich

From reader reviews:

Eric Graves:

What do you think about book? It is just for students since they're still students or this for all people in the world, what best subject for that? Just you can be answered for that concern above. Every person has various personality and hobby for each and every other. Don't to be forced someone or something that they don't want do that. You must know how great in addition to important the book Materials Concepts for Solar Cells (Energy Futures). All type of book can you see on many options. You can look for the internet solutions or other social media.

Cleveland Wheeler:

People live in this new day of lifestyle always attempt to and must have the extra time or they will get large amount of stress from both way of life and work. So , if we ask do people have spare time, we will say absolutely yes. People is human not just a robot. Then we request again, what kind of activity are there when the spare time coming to you actually of course your answer will unlimited right. Then ever try this one, reading publications. It can be your alternative throughout spending your spare time, the particular book you have read is definitely Materials Concepts for Solar Cells (Energy Futures).

Kent Dennis:

Reading can called imagination hangout, why? Because while you are reading a book specifically book entitled Materials Concepts for Solar Cells (Energy Futures) your mind will drift away trough every dimension, wandering in each and every aspect that maybe mysterious for but surely can be your mind friends. Imaging every single word written in a reserve then become one application form conclusion and explanation this maybe you never get ahead of. The Materials Concepts for Solar Cells (Energy Futures) giving you yet another experience more than blown away your brain but also giving you useful details for your better life within this era. So now let us teach you the relaxing pattern is your body and mind is going to be pleased when you are finished studying it, like winning a game. Do you want to try this extraordinary investing spare time activity?

Tammy Campbell:

As we know that book is significant thing to add our information for everything. By a publication we can know everything you want. A book is a range of written, printed, illustrated or blank sheet. Every year ended up being exactly added. This book Materials Concepts for Solar Cells (Energy Futures) was filled concerning science. Spend your free time to add your knowledge about your technology competence. Some people has different feel when they reading the book. If you know how big benefit from a book, you can sense enjoy to read a guide. In the modern era like right now, many ways to get book which you wanted.

Download and Read Online Materials Concepts for Solar Cells (Energy Futures) Thomas Dittrich #Q6O3VYJ1TPL

Read Materials Concepts for Solar Cells (Energy Futures) by Thomas Dittrich for online ebook

Materials Concepts for Solar Cells (Energy Futures) by Thomas Dittrich 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 Materials Concepts for Solar Cells (Energy Futures) by Thomas Dittrich books to read online.

Online Materials Concepts for Solar Cells (Energy Futures) by Thomas Dittrich ebook PDF download

Materials Concepts for Solar Cells (Energy Futures) by Thomas Dittrich Doc

Materials Concepts for Solar Cells (Energy Futures) by Thomas Dittrich Mobipocket

Materials Concepts for Solar Cells (Energy Futures) by Thomas Dittrich EPub