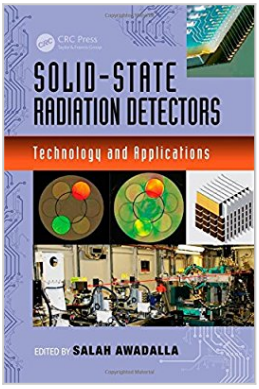

Solid-State Radiation Detectors: Technology and Applications (Devices, Circuits, and Systems)

From CRC Press

Solid-State Radiation Detectors: Technology and Applications (Devices, Circuits, and Systems) From CRC Press

Integrating aspects of engineering, application physics, and medical science, **Solid-State Radiation Detectors: Technology and Applications** offers a comprehensive review of new and emerging solid-state materials-based technologies for radiation detection. Each chapter is structured to address the current advantages and challenges of each material and technology presented, as well as to discuss novel research and applications.

Featuring contributions from leading experts in industry and academia, this authoritative text:

- Covers modern semiconductors used for radiation monitoring
- Examines CdZnTe and CdTe technology for imaging applications including three-dimensional capability detectors
- Highlights interconnect technology for current pixel detectors
- Describes hybrid pixel detectors and their characterizations
- Tackles the integrated analog signal processing read-out front ends for particle detectors
- Considers new organic materials with direct bandgap for direct energy detection
- Summarizes recent developments involving lanthanum halide and cerium bromide scintillators
- Analyzes the potential of recent progress in the field of crystallogenesis, quantum dots, and photonics crystals toward a new concept of x- and gamma-ray detectors based on metamaterials
- Explores position-sensitivity photomultipliers and silicon photomultipliers for scintillation crystals

Solid-State Radiation Detectors: Technology and Applications provides a valuable reference for engineers and scientists looking to enhance the performance of radiation detector technology for medical imaging and other applications.

Solid-State Radiation Detectors: Technology and Applications (Devices, Circuits, and Systems)

From CRC Press

Solid-State Radiation Detectors: Technology and Applications (Devices, Circuits, and Systems) From CRC Press

Integrating aspects of engineering, application physics, and medical science, **Solid-State Radiation Detectors: Technology and Applications** offers a comprehensive review of new and emerging solid-state materials-based technologies for radiation detection. Each chapter is structured to address the current advantages and challenges of each material and technology presented, as well as to discuss novel research and applications.

Featuring contributions from leading experts in industry and academia, this authoritative text:

- Covers modern semiconductors used for radiation monitoring
- Examines CdZnTe and CdTe technology for imaging applications including three-dimensional capability detectors
- Highlights interconnect technology for current pixel detectors
- Describes hybrid pixel detectors and their characterizations
- Tackles the integrated analog signal processing read-out front ends for particle detectors
- Considers new organic materials with direct bandgap for direct energy detection
- Summarizes recent developments involving lanthanum halide and cerium bromide scintillators
- Analyzes the potential of recent progress in the field of crystallogenesis, quantum dots, and photonics crystals toward a new concept of x- and gamma-ray detectors based on metamaterials
- Explores position-sensitivity photomultipliers and silicon photomultipliers for scintillation crystals

Solid-State Radiation Detectors: Technology and Applications provides a valuable reference for engineers and scientists looking to enhance the performance of radiation detector technology for medical imaging and other applications.

Solid-State Radiation Detectors: Technology and Applications (Devices, Circuits, and Systems) From CRC Press Bibliography

- Sales Rank: #3925455 in Books
- Published on: 2015-03-20
- Original language: English
- Number of items: 1
- Dimensions: 9.10" h x 1.10" w x 6.10" l, .0 pounds
- Binding: Hardcover
- 384 pages

Editorial Review

About the Author

Salah Awadalla obtained his Ph.D from the Department of Mechanical and Materials Science and Engineering at Washington State University, Pullman, USA. He is currently a professor in the Department of Mechanical Engineering at the University of Taibah, Yanbu, Saudi Arabia. In addition, he is the director of Teaching Laboratories and the Research and Development Program. In his professional career, Dr. Awadalla has held numerous positions ranging from staff scientist to manager and director at Washington State University and Redlen Technologies, Central Saanich, British Columbia, Canada. He has published more than 50 papers and holds more than eight U.S.-granted patents.

Users Review

From reader reviews:

Joanne Starks:

Reading a publication tends to be new life style in this particular era globalization. With studying you can get a lot of information that could give you benefit in your life. Along with book everyone in this world could share their idea. Ebooks can also inspire a lot of people. A great deal of author can inspire all their reader with their story or maybe their experience. Not only the storyline that share in the ebooks. But also they write about advantage about something that you need example. How to get the good score toefl, or how to teach your young ones, there are many kinds of book that you can get now. The authors on this planet always try to improve their ability in writing, they also doing some exploration before they write with their book. One of them is this Solid-State Radiation Detectors: Technology and Applications (Devices, Circuits, and Systems).

Charles Gray:

Do you have something that you want such as book? The e-book lovers usually prefer to decide on book like comic, brief story and the biggest an example may be novel. Now, why not striving Solid-State Radiation Detectors: Technology and Applications (Devices, Circuits, and Systems) that give your fun preference will be satisfied by simply reading this book. Reading behavior all over the world can be said as the method for people to know world considerably better then how they react towards the world. It can't be explained constantly that reading habit only for the geeky particular person but for all of you who wants to possibly be success person. So , for every you who want to start reading through as your good habit, you could pick Solid-State Radiation Detectors: Technology and Applications (Devices, Circuits, and Systems) become your own starter.

Adam Mathews:

Your reading 6th sense will not betray you, why because this Solid-State Radiation Detectors: Technology

and Applications (Devices, Circuits, and Systems) publication written by well-known writer whose to say well how to make book that can be understand by anyone who all read the book. Written inside good manner for you, leaking every ideas and publishing skill only for eliminate your own personal hunger then you still skepticism Solid-State Radiation Detectors: Technology and Applications (Devices, Circuits, and Systems) as good book not merely by the cover but also with the content. This is one publication that can break don't judge book by its deal with, so do you still needing a different sixth sense to pick this kind of!? Oh come on your studying sixth sense already told you so why you have to listening to another sixth sense.

Virginia Johnson:

A lot of e-book has printed but it is unique. You can get it by web on social media. You can choose the most beneficial book for you, science, amusing, novel, or whatever by means of searching from it. It is identified as of book Solid-State Radiation Detectors: Technology and Applications (Devices, Circuits, and Systems). You'll be able to your knowledge by it. Without making the printed book, it could possibly add your knowledge and make you actually happier to read. It is most significant that, you must aware about e-book. It can bring you from one spot to other place.

Read Solid-State Radiation Detectors: Technology and Applications (Devices, Circuits, and Systems) From CRC Press for online ebook

Solid-State Radiation Detectors: Technology and Applications (Devices, Circuits, and Systems) From CRC Press 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 Solid-State Radiation Detectors: Technology and Applications (Devices, Circuits, and Systems) From CRC Press books to read online.

Online Solid-State Radiation Detectors: Technology and Applications (Devices, Circuits, and Systems) From CRC Press ebook PDF download

Solid-State Radiation Detectors: Technology and Applications (Devices, Circuits, and Systems) From CRC Press Doc

Solid-State Radiation Detectors: Technology and Applications (Devices, Circuits, and Systems) From CRC Press Mobipocket

Solid-State Radiation Detectors: Technology and Applications (Devices, Circuits, and Systems) From CRC Press EPub

3O984KJ2UT5: Solid-State Radiation Detectors: Technology and Applications (Devices, Circuits, and Systems) From CRC Press