



# High-Frequency Electromagnetic Techniques: Recent Advances and Applications (Wiley Series in Microwave and Optical Engineering)

*Asoke K. Bhattacharyya*

Download now

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

# **High-Frequency Electromagnetic Techniques: Recent Advances and Applications (Wiley Series in Microwave and Optical Engineering)**

*Asoke K. Bhattacharyya*

**High-Frequency Electromagnetic Techniques: Recent Advances and Applications (Wiley Series in Microwave and Optical Engineering)** Asoke K. Bhattacharyya

Helps professionals find fast, accurate solutions to their design and analysis problems...

The first and only single-source reference of its kind, this unique book offers a comprehensive, in-depth look at the state-of-the-art methods in high-frequency analysis. A superb working resource for researchers and designers in a wide range of industries, it includes detailed demonstrations of how these methods can be applied to design and analysis problems involving radiation, scattering, antennas on structures, mutual coupling, EMC and EMI studies, terrain propagation and modeling, and more. It is also designed to function equally well as a textbook for graduate-level courses in electromagnetics.

- \* Exhaustive coverage of the latest HF analysis techniques
- \* Practical solutions to a plethora of engineering problems
- \* Numerous case studies and illustrative examples
- \* Discussions of some of the computer codes currently used to perform high-frequency calculations and their relative merits and limitations.

Electromagnetic engineers often deal with problems in which the surfaces of the geometries being studied do not conform to the eleven coordinate systems in which wave equations are separable. In such cases, when exact solutions of wave equations don't apply, approximate methods must suffice.

Among these is the class of high-frequency analytical techniques covered in this book--methods which lately have proven themselves to be indispensable to the design and analysis of radar systems, antennas, the interpretation of results in remote sensing, and the assessment of electromagnetic compatibility and electromagnetic interference in computer circuits.

The most comprehensive guide to the subject currently available, *High-Frequency Electromagnetic Techniques* provides an in-depth look at the latest methods for high-frequency analysis. Designed to help professionals find fast, accurate solutions to their design and analysis problems, this valuable working resource features many case studies and realistic examples which vividly demonstrate exactly how high-frequency techniques can be applied to such areas as:

- \* Analysis of near and far field patterns of horns and corrugated conical horns and their design
- \* Analysis and design of various reflector systems
- \* Slot antennas and their high-frequency formulations and design
- \* Antennas on finite bodies and on aircraft
- \* The estimation of mutual coupling between antennas on structures
- \* EMC and EMI problems with aircraft antennas and antennas on structures
- \* Terrain propagation modeling and the prediction of the effects of terrain geometry and properties on EM wave propagation
- \* Ground, sea, and atmospheric clutter modeling and the choice of radar parameters to obtain clutter reduction in many situations

Readers will also appreciate the fact that the author has devoted an entire chapter to detailed descriptions of all computer codes currently used to perform high-frequency calculations, including critical evaluations of their relative merits and limitations in a variety of applications, whenever possible.

While it can serve as an excellent graduate-level text for courses in electromagnetics, *High-Frequency Electromagnetic Techniques* is, above all, an indispensable working resource for researchers and designers in the telecommunications, defense, and computer industries. It also has an extensive list of references and additional references which would be helpful to readers for further study.



[Download High-Frequency Electromagnetic Techniques: Recent ...pdf](#)



[Read Online High-Frequency Electromagnetic Techniques: Recen ...pdf](#)

## **Download and Read Free Online High-Frequency Electromagnetic Techniques: Recent Advances and Applications (Wiley Series in Microwave and Optical Engineering) Asoke K. Bhattacharyya**

---

### **From reader reviews:**

#### **Nancy Farley:**

Playing with family inside a park, coming to see the ocean world or hanging out with buddies is thing that usually you might have done when you have spare time, subsequently why you don't try point that really opposite from that. Just one activity that make you not experiencing tired but still relaxing, trilling like on roller coaster you already been ride on and with addition of information. Even you love High-Frequency Electromagnetic Techniques: Recent Advances and Applications (Wiley Series in Microwave and Optical Engineering), it is possible to enjoy both. It is very good combination right, you still would like to miss it? What kind of hang type is it? Oh can happen its mind hangout folks. What? Still don't have it, oh come on its named reading friends.

#### **Anthony Collins:**

Your reading 6th sense will not betray an individual, why because this High-Frequency Electromagnetic Techniques: Recent Advances and Applications (Wiley Series in Microwave and Optical Engineering) book written by well-known writer we are excited for well how to make book which might be understand by anyone who have read the book. Written inside good manner for you, still dripping wet every ideas and publishing skill only for eliminate your own personal hunger then you still doubt High-Frequency Electromagnetic Techniques: Recent Advances and Applications (Wiley Series in Microwave and Optical Engineering) as good book not merely by the cover but also with the content. This is one guide that can break don't evaluate book by its include, so do you still needing an additional sixth sense to pick this!? Oh come on your examining sixth sense already alerted you so why you have to listening to an additional sixth sense.

#### **Jessie Adams:**

With this era which is the greater person or who has ability in doing something more are more precious than other. Do you want to become one of it? It is just simple solution to have that. What you are related is just spending your time little but quite enough to have a look at some books. Among the books in the top record in your reading list is High-Frequency Electromagnetic Techniques: Recent Advances and Applications (Wiley Series in Microwave and Optical Engineering). This book that is certainly qualified as The Hungry Hills can get you closer in turning into precious person. By looking upwards and review this publication you can get many advantages.

#### **Bonnie Wilson:**

As we know that book is important thing to add our understanding for everything. By a publication we can know everything we wish. A book is a pair of written, printed, illustrated or even blank sheet. Every year seemed to be exactly added. This guide High-Frequency Electromagnetic Techniques: Recent Advances and Applications (Wiley Series in Microwave and Optical Engineering) was filled regarding science. Spend your

spare time to add your knowledge about your scientific disciplines competence. Some people has several feel when they reading a new book. If you know how big selling point of a book, you can experience enjoy to read a publication. In the modern era like today, many ways to get book that you wanted.

**Download and Read Online High-Frequency Electromagnetic Techniques: Recent Advances and Applications (Wiley Series in Microwave and Optical Engineering) Asoke K. Bhattacharyya #BP7I0NRXCVD**

# **Read High-Frequency Electromagnetic Techniques: Recent Advances and Applications (Wiley Series in Microwave and Optical Engineering) by Asoke K. Bhattacharyya for online ebook**

High-Frequency Electromagnetic Techniques: Recent Advances and Applications (Wiley Series in Microwave and Optical Engineering) by Asoke K. Bhattacharyya 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 High-Frequency Electromagnetic Techniques: Recent Advances and Applications (Wiley Series in Microwave and Optical Engineering) by Asoke K. Bhattacharyya books to read online.

## **Online High-Frequency Electromagnetic Techniques: Recent Advances and Applications (Wiley Series in Microwave and Optical Engineering) by Asoke K. Bhattacharyya ebook PDF download**

**High-Frequency Electromagnetic Techniques: Recent Advances and Applications (Wiley Series in Microwave and Optical Engineering) by Asoke K. Bhattacharyya Doc**

**High-Frequency Electromagnetic Techniques: Recent Advances and Applications (Wiley Series in Microwave and Optical Engineering) by Asoke K. Bhattacharyya Mobipocket**

**High-Frequency Electromagnetic Techniques: Recent Advances and Applications (Wiley Series in Microwave and Optical Engineering) by Asoke K. Bhattacharyya EPub**