

Wave Scattering Theory: A Series Approach Based on the Fourier Transformation

Hyo Eom



Click here if your download doesn"t start automatically

Wave Scattering Theory: A Series Approach Based on the Fourier Transformation

Hyo Eom

Wave Scattering Theory: A Series Approach Based on the Fourier Transformation Hyo Eom The Fourier transform technique has been widely used in electrical engineer ing, which covers signal processing, communication, system control, electro magnetics, and optics. The Fourier transform-technique is particularly useful in electromagnetics and optics since it provides a convenient mathematical representation for wave scattering, diffraction, and propagation. Thus the Fourier transform technique has been long applied to the wave scattering problems that are often encountered in microwave antenna, radiation, diffraction, and electromagnetic interference. In order to u~derstand wave scattering in general, it is necessary to solve the wave equation subject to the prescribed boundary conditions. The purpose of this monograph is to present rigorous so lutions to the boundary-value problems by solving the wave equation based on the Fourier transform. In this monograph the technique of separation of vari ables is used to solve the wave equation for canonical scattering geometries such as conducting waveguide structures and rectangular/circular apertures. The Fourier transform, mode-matching, and residue calculus techniques are applied to obtain simple, analytic, and rapidly-convergent series solutions. The residue calculus technique is particularly instrumental in converting the solutions into series representations that are efficient and amenable to nu merical analysis. We next summarize the steps of analysis method for the scattering problems considered in this book. 1. Divide the scattering domain into closed and open regions. 2. Represent the scattered fields in the closed and open regions in terms of the Fourier series and transform, respectively. 3.

<u>Download</u> Wave Scattering Theory: A Series Approach Based on ...pdf

Read Online Wave Scattering Theory: A Series Approach Based ...pdf

Download and Read Free Online Wave Scattering Theory: A Series Approach Based on the Fourier Transformation Hyo Eom

From reader reviews:

Eric Bass:

What do you consider book? It is just for students because they're still students or that for all people in the world, what best subject for that? Just you can be answered for that problem above. Every person has diverse personality and hobby for every other. Don't to be compelled someone or something that they don't want do that. You must know how great along with important the book Wave Scattering Theory: A Series Approach Based on the Fourier Transformation. All type of book are you able to see on many sources. You can look for the internet sources or other social media.

Larry Witcher:

Do you one of people who can't read pleasurable if the sentence chained in the straightway, hold on guys this particular aren't like that. This Wave Scattering Theory: A Series Approach Based on the Fourier Transformation book is readable by simply you who hate those perfect word style. You will find the info here are arrange for enjoyable reading through experience without leaving also decrease the knowledge that want to offer to you. The writer connected with Wave Scattering Theory: A Series Approach Based on the Fourier Transformation content conveys objective easily to understand by many individuals. The printed and e-book are not different in the content but it just different as it. So , do you nevertheless thinking Wave Scattering Theory: A Series Approach Based on the Fourier Transformation is not loveable to be your top record reading book?

Rex Pelkey:

The publication with title Wave Scattering Theory: A Series Approach Based on the Fourier Transformation posesses a lot of information that you can find out it. You can get a lot of benefit after read this book. This kind of book exist new understanding the information that exist in this e-book represented the condition of the world at this point. That is important to yo7u to understand how the improvement of the world. That book will bring you in new era of the the positive effect. You can read the e-book with your smart phone, so you can read this anywhere you want.

Jennifer Powell:

The book untitled Wave Scattering Theory: A Series Approach Based on the Fourier Transformation contain a lot of information on the idea. The writer explains the woman idea with easy approach. The language is very simple to implement all the people, so do not necessarily worry, you can easy to read this. The book was authored by famous author. The author provides you in the new age of literary works. It is easy to read this book because you can please read on your smart phone, or device, so you can read the book inside anywhere and anytime. In a situation you wish to purchase the e-book, you can open up their official website in addition to order it. Have a nice learn. Download and Read Online Wave Scattering Theory: A Series Approach Based on the Fourier Transformation Hyo Eom #49WXPC8LG2D

Read Wave Scattering Theory: A Series Approach Based on the Fourier Transformation by Hyo Eom for online ebook

Wave Scattering Theory: A Series Approach Based on the Fourier Transformation by Hyo Eom 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 Wave Scattering Theory: A Series Approach Based on the Fourier Transformation by Hyo Eom books to read online.

Online Wave Scattering Theory: A Series Approach Based on the Fourier Transformation by Hyo Eom ebook PDF download

Wave Scattering Theory: A Series Approach Based on the Fourier Transformation by Hyo Eom Doc

Wave Scattering Theory: A Series Approach Based on the Fourier Transformation by Hyo Eom Mobipocket

Wave Scattering Theory: A Series Approach Based on the Fourier Transformation by Hyo Eom EPub