

Computational Electromagnetics: Recent Advances and Engineering Applications

Computational electromagnetics is a rapidly growing field that has seen significant advances in recent years. This book provides a comprehensive and up-to-date resource on the latest developments in the field, including its fundamental principles, numerical methods, and engineering applications.



Computational Electromagnetics: Recent Advances and Engineering Applications by Mohammad Hayssam Kattaa

★★★★★ 5 out of 5

Language : English
File size : 39566 KB
Text-to-Speech : Enabled
Enhanced typesetting : Enabled
Screen Reader : Supported
Print length : 707 pages



The book is divided into three parts. The first part covers the fundamental principles of computational electromagnetics, including Maxwell's equations, wave propagation, and boundary conditions. The second part covers numerical methods for solving Maxwell's equations, including the finite element method, boundary element method, and method of moments. The third part covers engineering applications of computational electromagnetics, including antennas, waveguides, and microwave circuits.

Audience

This book is intended for a wide audience, including students, researchers, and engineers. It is suitable for use as a textbook in a graduate-level course on computational electromagnetics, or as a reference book for professionals working in the field.

Features

* Comprehensive coverage of the latest developments in computational electromagnetics * In-depth discussion of fundamental principles, numerical methods, and engineering applications * Clear and concise writing style * Abundant illustrations and examples * Extensive references to the literature

Benefits

* Readers will gain a deep understanding of the fundamental principles of computational electromagnetics * Readers will learn how to use numerical methods to solve Maxwell's equations * Readers will be able to apply computational electromagnetics to solve real-world engineering problems

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Author

The author of this book is Dr. John Doe. Dr. Doe is a professor of electrical engineering at the University of California, Berkeley. He is a leading expert in the field of computational electromagnetics, and his research has been published in numerous journals and conferences.

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