

Microwave Engineering By Gsn Raju

When people should go to the ebook stores, search opening by shop, shelf by shelf, it is essentially problematic. This is why we allow the book compilations in this website. It will agreed ease you to see guide **Microwave Engineering By Gsn Raju** as you such as.

By searching the title, publisher, or authors of guide you in point of fact want, you can discover them rapidly. In the house, workplace, or perhaps in your method can be every best place within net connections. If you aspire to download and install the Microwave Engineering By Gsn Raju , it is unconditionally easy then, since currently we extend the associate to buy and create bargains to download and install Microwave Engineering By Gsn Raju consequently simple!

Electromagnetic Fields & Waves - R.L. Yadava

This book is designed to serve as a textbook for UG and PG students of Electronics and Communication, Electronics and Electrical, Electronics & Instrumentation and Telecommunication Engineering branches. It provides a thorough understanding of the electromagnetic theory and their properties, application and also the modern trends in Electromagnetism in detail. Book also describes transmission lines, wave guides, as well as the effects of EMI/EMC, including impedance matching and antennas. Written in an easy-to-understand manner, the book includes several illustrative examples, objective-type questions and exercise Questions to reinforce the theoretical understanding of subject. Appendices provide information and expressions as well as design data for references.

1996 Asia-Pacific Microwave Conference Proceedings - Dr. R. S. Gupta 1996

WAVE PROPAGATION AND ANTENNA ENGINEERING - KUMAR, SANJAY 2015-12-14

The book is primarily designed to cater to the needs of undergraduate and postgraduate students of Electronics and Communication Engineering and allied branches. It also caters for fundamental requirements of professionals working on design and development of antenna and wave propagation related equipment either in research laboratories or industries or academic institutions elsewhere. The book has been written with intent to grasp the basic understanding of theoretical as well as practical aspects of electromagnetic wave propagation and antenna engineering. The text has been aptly scripted considering the requirements of average students who can easily grasp and comprehend the basics of wave propagation and radiation mechanism of varieties of antennas coupled with their critical functionalities, utilities, advantages/disadvantages without any external assistance of teachers or other reference books. The book broaches very well on practical methods of parametric measurements of antenna with right measuring test equipment and associated tools. The last chapter of the book is dedicated to advance technology adopted in design and development of modern antenna. Key features • A fairly large number of well labelled diagrams to provide practical understanding of the concepts. • The placement of numericals at appropriate places develops confidence among readers and enthruses them further to read in depth to crack any regular or competitive examinations. • Chapter summary highlights important points for quick recap and revision before examination. • Well-crafted multiple choice questions with answers at the end of each chapter to stimulate thought process and prepare better for viva-voce and competitive examinations. • Appropriate number of unsolved numerical problems with answers to improve problem solving skill of students.

Antenna Pattern Synthesis - Donald R. Rhodes 1972

An investigation was made toward evolving a method of two-dimensional antenna pattern synthesis such that antenna specifications involving dimensionality, shape, and the constituent relations can be related to the frequency characteristics. (Author).

Microelectronics, Electromagnetics and Telecommunications - P. Satish Rama Chowdary 2020-06-24

This book discusses the latest developments and outlines future trends in the fields of microelectronics, electromagnetics and telecommunication. It includes original research presented at the International Conference on Microelectronics, Electromagnetics and Telecommunication (ICMEET 2019), organized by the Department of ECE, Raghu Institute of Technology, Andhra Pradesh, India. Written by scientists, research scholars and practitioners from leading universities, engineering colleges and R&D institutes around the globe, the papers share the latest breakthroughs in and promising solutions to the most important issues

facing today's society.

Fiber Optic Communications - Palais 2005

Robot-Assisted Radical Prostatectomy - John W. Davis 2016-09-07

This book addresses knowledge gaps in RARP in 3 key sections: 1) Step-by-step approach including multiple technique options and innovations, 2) Patient selection, safety, outcomes, and 3) Preparing the patient for surgery. The order is more based upon knowledge priority rather than a chronologic sequence in which part 3 would go first. Part two allows more summary and commentary on evidence and part three allows some creative content that is otherwise hard to find in one place—medical evaluations, imaging, clinical trials, patient education, etc. This textbook emphasizes content for the advanced skills surgeon in that multiple techniques are presented as well as state of the art evidence. The learning curve is addressed and the authors clarify how this text is useful for learners. The caveat is that they should be careful in patient selection and stick with what their mentors are showing them. With experience, they can then branch out into the many techniques presented here.

Robot-Assisted Radical Prostatectomy: Beyond the Learning Curve will also have cross-over appeal for surgical assistants, physician assistants, nurses, and anyone else involved in the surgical care of prostate cancer. *RF and Microwave Circuits, Measurements, and Modeling* - Mike Golio 2018-10-08

Highlighting the challenges RF and microwave circuit designers face in their day-to-day tasks, *RF and Microwave Circuits, Measurements, and Modeling* explores RF and microwave circuit designs in terms of performance and critical design specifications. The book discusses transmitters and receivers first in terms of functional circuit block and then examines each block individually. Separate articles consider fundamental amplifier issues, low noise amplifiers, power amplifiers for handset applications and high power, power amplifiers. Additional chapters cover other circuit functions including oscillators, mixers, modulators, phase locked loops, filters and multiplexers. New chapters discuss high-power PAs, bit error rate testing, and nonlinear modeling of heterojunction bipolar transistors, while other chapters feature new and updated material that reflects recent progress in such areas as high-volume testing, transmitters and receivers, and CAD tools. The unique behavior and requirements associated with RF and microwave systems establishes a need for unique and complex models and simulation tools. The required toolset for a microwave circuit designer includes unique device models, both 2D and 3D electromagnetic simulators, as well as frequency domain based small signal and large signal circuit and system simulators. This unique suite of tools requires a design procedure that is also distinctive. This book examines not only the distinct design tools of the microwave circuit designer, but also the design procedures that must be followed to use them effectively.

Problems on Material and Energy Balance Calculation - K. Balu 2009-01-01

Mass and Energy Balance Calculations are the fundamental components in the Design and Development of Chemical Process Industries. Mass Balance Calculations are performed to determine the yields of main products, byproducts, consumption of raw material and production losses. Only when the Mass Balance is performed, the Process Engineer can make calculations required for design of production equipment in the process. Energy balance involves the computation of input and outputs of energy in equipments. Energy Balance is performed from Material Balance taking into account the thermal effects (Exothermic or Endothermic) of reactions and the physical transformations (Evaporation, Crystallization) occurring in the Process Equipment. The present book has problems and solutions in Material and Energy Balance in Process Equipment. This is followed by Energy Balance problems. All problems assume Steady State system. The text covers the syllabus of all Chemical

Engineering Schools offering this course. The number and variety of problems proposed in this book are extensive. The problems are organized in each chapter according to subject matter. It is possible for answers to differ slightly due to different sources of data. The teaching experience of authors convinces that one of the glaring weakness of the students in Chemical and Petroleum Engineering is their inability to think clearly and accurately in terms of arithmetic. It is hoped this book will prove of real value in Process Calculations Instructions in classroom. This can also serve as a refresher book for practising engineers.

Electronic Devices and Circuits - Jacob Millman 1976

Microwave Devices and Circuits - Samuel Y. Liao 1990-09

Communication Systems - Simon S. Haykin 1983

Hello, Android - Ed Burnette 2015-05-04

Google Android dominates the mobile market, and by targeting Android, your apps can run on most of the phones and tablets in the world. This new fourth edition of the #1 book for learning Android covers all modern Android versions from Android 4.1 through Android 5.0. Freshly added material covers new Android features such as Fragments and Google Play Services. Android is a platform you can't afford not to learn, and this book gets you started. Android is a software toolkit for mobile phones and tablets, created by Google. It's inside more than a billion devices, making Android the number one platform for application developers. Your own app could be running on all those devices! Getting started developing with Android is easy. You don't even need access to an Android phone, just a computer where you can install the Android SDK and the emulator that comes with it. Within minutes, Hello, Android gets you creating your first working application: Android's version of "Hello, World." From there, you'll build up a more substantial example: an Ultimate Tic-Tac-Toe game. By gradually adding features to the game, you'll learn about many aspects of Android programming, such as creating animated user interfaces, playing music and sound effects, building location-based services (including GPS and cell-tower triangulation), and accessing web services. You'll also learn how to publish your applications to the Google Play Store. This fourth edition of the bestselling Android classic has been revised for Android 4.1-4.3 (Jelly Bean), 4.4 (KitKat), and Android 5.0 (Lollipop). Topics have been streamlined and simplified based on reader feedback, and every page and example has been reviewed and updated for compatibility with the latest versions of Android. If you'd rather be coding than reading about coding, this book is for you.

Antennas and Wave Propagation - A. R. Harish 2007

Aimed at a single-semester course on antennas at the undergraduate level, Antennas and Wave Propagation provides a lucid explanation of the fundamentals of antennas and propagation. This student-friendly text also includes simple design procedures along with a large number of examples and exercises.

Fractal Apertures in Waveguides, Conducting Screens and Cavities - Basudeb Ghosh 2014-06-12

This book deals with the design and analysis of fractal apertures in waveguides, conducting screens and cavities using numerical electromagnetics and field-solvers. The aim is to obtain design solutions with improved accuracy for a wide range of applications. To achieve this goal, a few diverse problems are considered. The book is organized with adequate space dedicated for the design and analysis of fractal apertures in waveguides, conducting screens and cavities, microwave/millimeter wave applications followed by detailed case-study problems to infuse better insight and understanding of the subject. Finally, summaries and suggestions are given for future work. Fractal geometries were widely used in electromagnetics, specifically for antennas and frequency selective surfaces (FSS). The self-similarity of fractal geometry gives rise to a multiband response, whereas the space-filling nature of the fractal geometries makes it an efficient element in antenna and FSS unit cell miniaturization. Until now, no efforts were made to study the behavior of these fractal geometries for aperture coupling problems. The aperture coupling problem is an important boundary value problem in electromagnetics and used in waveguide filters and power dividers, slotted ground planes, frequency selective surfaces and metamaterials. The present book is intended to initiate a study of the characteristics of fractal apertures in waveguides, conducting screens and cavities. To perform a unified analysis of these entirely dissimilar problems, the "generalized network formulation of the aperture problems" by Mautz and Harrington was extended to multiple-aperture geometry. The

authors consider the problem of coupling between two arbitrary regions coupled together via multiple apertures of arbitrary shape. MATLAB codes were developed for the problems and validated with the results available in the literature as well as through simulations on ANSOFT's HFSS.

Electronic Devices and Circuits - G. S. N. Raju 2006-01-01

Detailed theory, operation and application of devices and circuits 1000 objective type question and answers 150 solved problems 100 exercise problems with solution manual 27 experiments Power consumption details Electronic Devices and Circuits contains the fundamentals of electronic devices and their applications. The book is centred around the basic characteristics, analysis, design and application aspects of conductors, insulators, semi-conductors, resistors, inductors, capacitors, basic network theorems, test and measuring meters, fabrication techniques, diodes, transistors, amplifiers and oscillators. The fundamentals concepts of the subject are described pointwise for easy readability and grasp. Several solved problems, objective-type questions and multiple-choice question with answers, exercise questions with solution manual and a large number worked out examples, besides 27 experiments conducted for all the engineering and scient students are the highlight of the book. The entire content in the book is provided in a logical, orderly and a self-understandable manner.

Antenna and Wave Propagation - Kamal Kishore 2009

Provides an introduction to the fundamental principles of antennas and wave propagation. Unlike other books available, there is more emphasis on mathematical explanation in addition to physical understanding. Physical principles are explained in detail with clear diagrams to support the theory.

Electromagnetic Field Theory and Transmission Lines - Raju, G. S. N.

Electromagnetic Field Theory and Transmission Lines is ideal for a single semester, first course on Electromagnetic Field Theory (EMFT) at the undergraduate level. This book uses diagrammatic representations and real life examples to explain the fu

Proceedings of International Conference on Remote Sensing for Disaster Management - Peddada Jagadeeswara Rao 2018-06-23

The natural disasters are the killer agents which can/can't be predicted even though we have modern technology. Every year, in one place or another, disasters striking which is devastating the area and surroundings, leading to ecological disruption besides huge loss of life and property. India is vulnerable to cyclones, landslides/avalanches, earthquakes, floods, droughts, forest fires, epidemics, etc. The 5700-km long coast of India, with its dense population is vulnerable to cyclones/low depressions, tsunamis, etc. The 2400-km long rugged Himalayan terrain is vulnerable to landslides, avalanches and earthquakes. India is not only vulnerable to natural disasters, it is also experiencing industrial accidents. The Bhopal Gas tragedy is one of the major man-made disasters in the world. The state of Andhra Pradesh has 970-km long coastline with two major rivers, etc. The conference is conducted in Visakhapatnam, is famous for industries and tourism. Recently, several industrial accidents took place, besides major natural disasters like Hud-Hud, etc. Disaster management shall be implemented from the grass root level in vulnerable areas to improve the capacity building, so as to minimize the losses. The capacity building coupled with technology results in reduction of loss of life and property.

Microelectronics, Electromagnetics and Telecommunications - Ganapati Panda 2018-11-02

The book discusses the latest developments and outlines future trends in the fields of microelectronics, electromagnetics and telecommunication. It contains original research works presented at the International Conference on Microelectronics, Electromagnetics and Telecommunication (ICMEET 2018), organised by GVP College of Engineering (A), Andhra Pradesh, India. The respective papers were written by scientists, research scholars and practitioners from leading universities, engineering colleges and R&D institutes from all over the world, and share the latest breakthroughs in and promising solutions to the most important issues facing today's society.

Electronic Devices And Circuits - J. B. Gupta 2009

Antennas and Wave Propagation - G. S. N. Raju 2006

Antennas and Wave Propagation is written for the first course on the same. The book begins with an introduction that discusses the fundamental concepts, notations, representation and principles that govern the field of antennas. A separate chapter on mathematical preliminaries is discussed followed by chapters on every aspect of

antennas from Maxwell's equations to antenna array analysis, antenna array synthesis, antenna measurements and wave propagation.

Recombinant DNA Technology - Sardul Singh Sandhu 2013-12-30
Introduces the basic principles and techniques of recombinant DNA. The book begins with an introduction to the different tools used for gene cloning. The final chapters cover the application of Recombinant Technology to current research and provide an inside look at the human genome project, ribozyme technology, antisense technology, DNA sequencing, and protein engineering.

Radar Engineering - Raju 2013-12-30

This book contains the applications of radars, fundamentals and advanced concepts of CW, CW Doppler, FMCW, Pulsed doppler, MTI, MST and phased array radars etc. It also includes effect of different parameters on radar operation, various losses in radar systems, radar transmitters, radar receivers, navigational aids and radar antennas. Key features : Nine chapters exclusively suitable for one semester course in radar engineering. More than 100 solved problems. More than 1000 objective questions with answers. More than 600 multiple choice questions with answers. Five model question papers. Logical and self-understandable system description.

Electromagnetic Field Theory - Uday A. Bakshi 2020-11-01

The comprehensive study of electric, magnetic and combined fields is nothing but electromagnetic engineering. Along with electronics, electromagnetics plays an important role in other branches. The book is structured to cover the key aspects of the course Electromagnetic Field Theory for undergraduate students. The knowledge of vector analysis is the base of electromagnetic engineering. Hence book starts with the discussion of vector analysis. Then it introduces the basic concepts of electrostatics such as Coulomb's law, electric field intensity due to various charge distributions, electric flux, electric flux density, Gauss's law, divergence and divergence theorem. The book continues to explain the concept of elementary work done, conservative property, electric potential and potential difference and the energy in the electrostatic fields. The detailed discussion of current density, continuity equation, boundary conditions and various types of capacitors is also included in the book. The book provides the discussion of Poisson's and Laplace's equations and their use in variety of practical applications. The chapter on magnetostatics incorporates the explanation of Biot-Savart's law, Ampere's circuital law and its applications, concept of curl, Stoke's theorem, scalar and vector magnetic potentials. The book also includes the concept of force on a moving charge, force on differential current element and magnetic boundary conditions. The book covers all the details of Faraday's laws, time varying fields, Maxwell's equations and Poynting theorem. Finally, the book provides the detailed study of uniform plane waves including their propagation in free space, perfect dielectrics, lossy dielectrics and good conductors. The book uses plain, lucid language to explain each topic. The book provides the logical method of explaining the various complicated topics and stepwise methods to make the understanding easy. The variety of solved examples is the feature of this book which helps to inculcate the knowledge of the electromagnetics in the students. Each chapter is well supported with necessary illustrations and self-explanatory diagrams. The book explains the philosophy of the subject which makes the understanding of the concepts very clear and makes the subject more interesting.

Microwave Engineering - G. S. N. Raju 2008-01-01

Though good books are available but on self-contained concise & comprehensive textbook covering the syllabus of indigenous universities is not available. The present Microwave Engineering is an attempt in that direction. Starting with the fundamentals, the book discusses: Microwaves and their Applications; Microwave Tubes; Microwave Semiconductor Devices; Scattering Matrix Parameters; Microwave Passive Components; Microwave Transmission Lines; Microwave Integrated; Circuits; Microwave Antennas; and Microwave Measurements

Microwave Engineering - David M. Pozar 2011-11-22

Pozar's new edition of Microwave Engineering includes more material on active circuits, noise, nonlinear effects, and wireless systems. Chapters on noise and nonlinear distortion, and active devices have been added along with the coverage of noise and more material on intermodulation distortion and related nonlinear effects. On active devices, there's more updated material on bipolar junction and field effect transistors. New and updated material on wireless communications systems, including link budget, link margin, digital modulation methods, and bit error rates is also part of the new edition. Other new material includes a section on transients on transmission lines, the theory of power waves, a discussion

of higher order modes and frequency effects for microstrip line, and a discussion of how to determine unloaded.

Fundamentals of Air Pollution 2e - Arthur C. Stern 1984-05-28
Fundamentals of Air Pollution, Second Edition discusses the basic chemistry, physics, and engineering of air pollution. This edition explores the processes and equipment that produce less pollution in the atmosphere. This book is comprised of six parts encompassing 28 chapters. This text starts with an overview of the predominant air pollution problems during the Industrial Revolution, including smoke and ash produced by burning oil or coal in the boiler furnaces of power plants, marine vessels, and locomotives. This edition then explores the mathematical models of atmospheric transport and diffusion and discusses the air pollution control in communities. Other chapters deal with atmospheric chemistry, control technology, and visibility through the atmosphere. This book further examines the regulatory concepts that have become more significant, such as the bubble concept, air quality, emission standards, and the trading and banking of emission rights. Air pollution scientists, atmospheric scientists, ecologists, engineers, educators, researchers, and students will find this book extremely useful.
Electromagnetic Field Theory and Transmission Lines - G. S. N. Raju 2006

Electromagnetic Field Theory and Transmission Lines is an ideal textbook for a single semester, first course on Electromagnetic Field Theory (EMFT) at the undergraduate level. This book uses plain and simple English, diagrammatic representations and real life examples to explain the fundamental concepts, notations, representation and principles that govern the field of EMFT. The chapters cover every aspect of EMFT from electrostatics to advanced topics dealing with Electromagnetic Interference (EMI)/Electromagnetic Compatibility (EMC), EMC standards and design methods for EMC. Careful and deta.

Microwave, Radar & RF Engineering - Prakash Kumar Chaturvedi 2018-06-20

This is a textbook for upper undergraduate and graduate courses on microwave engineering, written in a student-friendly manner with many diagrams and illustrations. It works towards developing a foundation for further study and research in the field. The book begins with a brief history of microwaves and introduction to core concepts of EM waves and wave guides. It covers equipment and concepts involved in the study and measurement of microwaves. The book also discusses microwave propagation in space, microwave antennae, and all aspects of RADAR. The book provides core pedagogy with chapter objectives, summaries, solved examples, and end-of-chapter exercises. The book also includes a bonus chapter which serves as a lab manual with 15 simple experiments detailed with proper circuits, precautions, sample readings, and quiz/viva questions for each experiment. This book will be useful to instructors and students alike.

Electromagnetics, Microwave Circuit and Antenna Design for Communications Engineering - Peter Russer 2003

If you're looking for a clear, comprehensive overview of basic electromagnetics principles and applications to antenna and microwave circuit design for communications, this authoritative book is your best choice. Including concise explanations of all required mathematical concepts needed to fully comprehend the material, the book is your complete resource for understanding electromagnetics in current, emerging and future broadband communication systems, as well as high-speed analogue and digital electronic circuits and systems.

Introduction to Electromagnetic Waves with Maxwell's Equations - Ozgur Ergul 2021-09-14

Discover an innovative and fresh approach to teaching classical electromagnetics at a foundational level Introduction to Electromagnetic Waves with Maxwell's Equations delivers an accessible and practical approach to teaching the wellknown topics all electromagnetics instructors must include in their syllabus. Based on the author's decades of experience teaching the subject, the book is carefully tuned to be relevant to an audience of engineering students who have already been exposed to the basic curricula of linear algebra and multivariate calculus. Forming the backbone of the book, Maxwell's equations are developed step-by-step in consecutive chapters, while related electromagnetic phenomena are discussed simultaneously. The author presents accompanying mathematical tools alongside the material provided in the book to assist students with retention and comprehension. The book contains over 100 solved problems and examples with stepwise solutions offered alongside them. An accompanying website provides readers with additional problems and solutions. Readers will also benefit from the inclusion of: A thorough introduction to preliminary concepts in the field,

including scalar and vector fields, cartesian coordinate systems, basic vector operations, orthogonal coordinate systems, and electrostatics, magnetostatics, and electromagnetics An exploration of Gauss' Law, including integral forms, differential forms, and boundary conditions A discussion of Ampere's Law, including integral and differential forms and Stoke's Theorem An examination of Faraday's Law, including integral and differential forms and the Lorentz Force Law Perfect for third-and fourth-year undergraduate students in electrical engineering, mechanical engineering, applied maths, physics, and computer science, Introduction to Electromagnetic Waves with Maxwell's Equations will also earn a place in the libraries of graduate and postgraduate students in any STEM program with applications in electromagnetics.

Optical and Wireless Technologies - Vijay Janyani 2019-04-09

This volume presents selected papers from the 2nd International Conference on Optical and Wireless Technologies, conducted from 10th to 11th February, 2018. It focuses on extending the limits of currently used systems encompassing optical and wireless domains, and explores novel research on wireless and optical techniques and systems, describing practical implementation activities, results and issues. The book will serve as a valuable reference resource for academics and researchers across the globe.

The RF and Microwave Handbook - Mike Golio 2000-12-20

The recent shift in focus from defense and government work to commercial wireless efforts has caused the job of the typical microwave engineer to change dramatically. The modern microwave and RF engineer is expected to know customer expectations, market trends, manufacturing technologies, and factory models to a degree that is unprecedented in the

Handbook of RF and Microwave Power Amplifiers - John L. B. Walker 2012

This is a one-stop guide for circuit designers and system/device engineers, covering everything from CAD to reliability.

Microelectronics, Electromagnetics and Telecommunications - Suresh Chandra Satapathy 2015-12-24

This volume contains 73 papers presented at ICMEET 2015:

International Conference on Microelectronics, Electromagnetics and Telecommunications. The conference was held during 18 - 19 December, 2015 at Department of Electronics and Communication Engineering, GITAM Institute of Technology, GITAM University, Visakhapatnam, INDIA. This volume contains papers mainly focused on Antennas, Electromagnetics, Telecommunication Engineering and Low Power VLSI Design.

Transmission Lines & Waveguides - Uday A. Bakshi 2020-11-01

The book is written for an undergraduate course on the transmission lines and waveguides. It provides comprehensive coverage of four terminal networks, filters, transmission lines and various types of waveguides. The book starts with explaining the symmetrical and asymmetrical four terminal networks which form the basis of filters. Then book provides the detailed discussion of various types of filters. The discussion of composite filters and crystal filter is also included in the book. The book covers the transmission line parameters in detail along with reflection on a line, reflection loss and reflection factor. The chapter on transmission line at radio frequency includes parameters of line at

high frequency, standing waves, standing wave ratio, single stub matching, double stub matching and Smith chart. The book covers the various aspects of guided waves between parallel planes. It also provides the discussion of rectangular and circular waveguides. At the end book incorporates the discussion of resonators. Each chapter provides the detailed explanation of the topic, practical examples and variety of solved problems. The explanations are given using very simple and lucid language. All the chapters are arranged in a specific sequence which helps to build the understanding of the subject in a logical fashion. The book explains the philosophy of the subject which makes the understanding of the concepts very clear and makes the subject more interesting.

Inviscid Incompressible Flow - Jeffrey S. Marshall 2001-06-25

A comprehensive, modern account of the flow of inviscid incompressible fluids This one-stop resource for students, instructors, and professionals goes beyond analytical solutions for irrotational fluids to provide practical answers to real-world problems involving complex boundaries. It offers extensive coverage of vorticity transport as well as computational methods for inviscid flows, and it provides a solid foundation for further studies in fluid dynamics. Inviscid Incompressible Flow supplies a rigorous introduction to the continuum mechanics of fluid flows. It derives vector representation theorems, develops the vorticity transport theorem and related integral invariants, and presents theorems associated with the pressure field. This self-contained sourcebook describes both solution methods unique to two-dimensional flows and methods for axisymmetric and three-dimensional flows, many of which can be applied to two-dimensional flows as a special case. Finally, it examines perturbations of equilibrium solutions and ensuing stability issues. Important features of this powerful, timely volume include: * Focused, comprehensive coverage of inviscid incompressible fluids * Four entire chapters devoted to vorticity transport and solution of vortical flows * Theorems and computational methods for two-dimensional, axisymmetric, and three-dimensional flows * A companion Web site containing subroutines for calculations in the book * Clear, easy-to-follow presentation Inviscid Incompressible Flow, the only all-in-one presentation available on this topic, is a first-rate teaching and learning tool for graduate- and senior undergraduate-level courses in inviscid fluid dynamics. It is also an excellent reference for professionals and researchers in engineering, physics, and applied mathematics.

Millimeter Wave and Microwave - 1990

Antennas and Wave Propagation - Pedro Pinho 2018-09-26

Antennas and radio propagation are continuously and rapidly evolving and new challenges arise every day. As a result of these rapid changes the need for up-to-date texts that address this growing field from an interdisciplinary perspective persists. This book, organized into nine chapters, presents new antenna designs and materials that will be used in the future, due to the trend for higher frequencies, as well as a bird's eye view of some aspects related to radio propagation channel modeling. The book covers the theory but also the practical aspects of technology implementation in a way that is suitable for undergraduate and graduate-level students, as well as researchers and professional engineers.