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This book is the first systematic exposition on the emerging domain of wireless power transfer in ad hoc communication networks. It selectively spans a coherent, large spectrum of fundamental aspects of wireless power transfer, such as mobility management in the network, combined wireless power and information transfer, energy flow among network devices, joint activities with wireless power transfer (routing, data gathering and solar energy harvesting), and safety provisioning through electromagnetic radiation control, as well as fundamental and novel circuits and technologies enabling the wide application of wireless power transfer. Comprising a total of 27 chapters, contributed by leading experts, the content is organized into six thematic sections: technologies, communication, mobility, energy flow, joint operations, and electromagnetic radiation awareness. It will be valuable for researchers, engineers, educators, and students, and it may also be used as a supplement to academic courses on algorithmic applications, wireless protocols, distributed computing, and networking.

This book includes papers presented at the Second International Conference on Electronic Engineering and Renewable Energy (ICEERE 2020), which focus on the application of artificial intelligence techniques, emerging technology and the Internet of things in electrical and renewable energy systems, including hybrid systems, micro-grids, networking, smart health applications, smart grid, mechatronics and electric vehicles. It particularly focuses on new renewable energy technologies for agricultural and rural areas to promote the development of the Euro-Mediterranean region. Given its scope, the book is of interest to graduate students, researchers and practicing engineers working in the fields of electronic engineering and renewable energy.

This Brief reviews a number of techniques exploiting the surrogate-based optimization concept and variable-fidelity EM Simulations for efficient optimization of antenna structures. The introduction of each method is illustrated with examples of antenna design. The authors demonstrate the ways in which practitioners can obtain an optimized antenna design at the computational cost corresponding to a few high-fidelity EM simulations of the antenna structure. There is also a discussion of the selection of antenna model fidelity and its influence on performance of the surrogate-based design process. This volume is suitable for electrical engineers in academia as well as industry, antenna designers and engineers dealing with computationally-expensive design problems.

Gas Vapor Liquid Systems

Antenna Design by Simulation-Driven Optimization

Proceedings of the 1st International Conference on Smart Innovation, Ergonomics and Applied Human Factors (SEAHF)

Third International Conference, ICAICR 2019, Shimla, India, June 15–16, 2019, Revised Selected Papers, Part I

Gas (vapor) Liquid Systems

Reconfigurable Intelligent Surface-Empowered 6G

Electromagnetics, Microwave Circuit and Antenna Design for Communications Engineering

This book addresses a range of real-world issues in the fields of antennas and propagation, electromagnetics, RF/microwave/millimeter-wave systems, satellite communications, radars, satellite remote sensing, satellite navigation and spacecraft system engineering. It also aids engineers technical managers and professionals working on antenna and RF designs. Marketing and business people in satellites, wireless, and electronics area who want to acquire a basic understanding of the technology will also find this book of interest.

This book describes the advanced developments in methodology and applications of NMR spectroscopy to life science and materials science. Experts who are leaders in the development of new methods and applications of life and material sciences have contributed an exciting range of topics that cover recent advances in structural determination of biological and material molecules, dynamic aspects of biological and material molecules, and development of novel NMR techniques, including resolution and sensitivity enhancement. First, this book particularly emphasizes the experimental details for new researchers to use NMR spectroscopy and pick up the potentials of NMR spectroscopy. Second, the book is designed for those who are involved in either developing the technique or expanding the NMR application fields by applying them to specific samples. Third, the Nuclear Magnetic Resonance Society of Japan has organized this book not only for NMR members of Japan but also for readers worldwide who are interested in using NMR spectroscopy extensively.

The book covers recent trends in the field of devices, wireless communication and networking. It presents the outcomes of the International Conference in Communication, Devices and Networking (ICCDN 2018), which was organized by the Department of Electronics and Communication Engineering, Sikkim Manipal Institute of Technology, Sikkim, India on 2-3 June, 2018. Gathering cutting-edge research papers prepared by researchers, engineers and industry professionals, it will help young and experienced scientists and developers alike to explore new perspectives, and offer them inspirations on addressing real-world problems in the field of electronics, communication, devices and networking.

This book focuses on engineering design approaches for spacecraft antennas. Based on their functions in spacecraft, it discusses practical antenna design, measurement and testing. Most of the antennas covered originated at the China Academy of Space Technology (CAST), which has launched almost 300 satellites into orbit. The book presents antenna systems for seven existing spacecraft designs, while also introducing readers to new antenna technologies for spacecraft. This book is intended for researchers, graduate students, and engineers in various fields of aerospace technology and astronautics, especially spacecraft design, communication engineering and related areas.

The Maritime Engineering Reference Book

Proceedings of ICNDV 2019

Advances in VLSI, Communication, and Signal Processing

Methodology and Application to Life Science and Materials Science

Development and Implementation of RFID Technology

Surrogate-Based Modeling and Optimization

This book presents the proceedings of the 8th International Workshop on Soft Computing Applications, SOFA 2018, held on 13–15 September 2018 in Arad, Romania. The workshop was organized by Aurel Vlaicu University of Arad, in conjunction with the Institute of Computer Science, Iasi Branch of the Romanian Academy, IEEE Romanian Section, Romanian Society of Control Engineering and Technical Informatics – Arad Section, General Association of Engineers in Romania, Arad Section and BTM Researches Arad. The papers included in these proceedings, published post-conference, cover the research including Knowledge-Based Technologies for Web Applications, Cloud Computing, Security Algorithms and Computer Networks, Business Process Management, Computational Intelligence in Education and Modelling and Applications in Textiles and many other areas related to the Soft Computing. The book is directed to professors, researchers, and graduate students in a area of soft computing techniques and applications.

Contemporary engineering design is heavily based on computer simulations. Accurate, high-fidelity simulations are used not only for design verification but, even more importantly, to adjust parameters of the system to have it meet given performance requirements. Unfortunately, accurate simulations are often computationally very expensive with evaluation times as long as hours or even days per design, making design automation using conventional methods impractical. These and other problems can be alleviated by the development and employment of so-called surrogates that reliably represent the expensive, simulation-based model of the system or device of interest but they are much more reasonable and analytically tractable. This volume features surrogate-based modeling and optimization techniques, and their applications for solving difficult and computationally expensive engineering design problems. It begins by presenting the basic concepts and formulations of the surrogate-based modeling and optimization paradigm and then discusses relevant modeling techniques, optimization algorithms and design procedures, as well as state-of-the-art developments. The chapters are self-contained with basic concepts and formulations along with applications and examples. The book will be useful to researchers in engineering and mathematics, in particular those who employ computationally heavy simulations in their design work.

The Multilevel Fast Multipole Algorithm (MLFMA) for Solving Large-Scale Computational Electromagnetics Problems provides a detailed and instructional overview of implementing MLFMA. The book: Presents a comprehensive treatment of the MLFMA algorithm, including basic linear algebra concepts, recent developments on the parallel computation, and a number of application examples Covers solutions of electromagnetic problems involving dielectric objects and perfectly-conducting objects Discusses applications including scattering from airborne targets, scattering from red blood cells, radiation from antennas and arrays, metamaterials etc. Is written by authors who have more than 25 years experience on the development and implementation of MLFMA The book will be useful for post-graduate students, researchers, and academics, studying in the areas of computational electromagnetics, numerical analysis, and computer science, and who would like to implement and develop rigorous simulation environments based on MLFMA.

This is the first comprehensive book to address the design of RF MEMS-based circuits for use in high performance wireless systems. A groundbreaking research and reference tool, the book enables you to understand the realm of applications of RF MEMS technology; become knowledgeable of the wide variety and performance levels of RF MEMS devices; and partition the architecture of wireless systems to achieve greater levels of performance. This innovative resource also guides you through the design process of RF MEMS-based circuits, and establishes a practical knowledge base for the design of high-yield RF MEMS-based circuits. The book features exercises and detailed case studies on working RF MEMS circuits that help you decide what approaches best fit your design constraints. This unified treatment of RF MEMS-based circuit technology opens up a new world of solutions for meeting the unique challenges of low power/portable wireless products.

Recent Advances and Engineering Applications

Radio-Frequency Electronics

Space Antenna Handbook

Proceedings of ICICCD 2017

Physics of Intensity Dependent Beam Instabilities

Computational Electromagnetics

This two-volume set (CCIS 1075 and CCIS 1076) constitutes the refereed proceedings of the Third International Conference on Advanced Informatics for Computing Research, ICAICR 2019, held in Shimla, India, in June 2019. The 78 revised full papers presented were carefully reviewed and selected from 382 submissions. The papers are organized in topical sections on computing methodologies; hardware; information systems; networks; software and its engineering.

This book comprises select peer-reviewed papers from the International Conference on VLSI, Communication and Signal processing (VCAS) 2019, held at Motilal Nehru National Institute of Technology (MNIT) Allahabad, Prayagraj, India. The contents focus on latest research in different domains of electronics and communication engineering, in particular microelectronics and VLSI design, communication systems and networks, and signal and image processing. The book also discusses the emerging applications of novel tools and techniques in image, video and multimedia signal processing. This book will be useful to students, researchers and professionals working in the electronics and communication domain.

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.

Emerging Topics in Computational Electromagnetics in Computational Electromagnetics presents advances in Computational Electromagnetics. This book is designed to fill the existing gap in current CEM literature that only cover the conventional numerical techniques for solving traditional EM problems. The book examines new algorithms, and applications of these algorithms for solving problems of current interest that are not readily amenable to efficient treatment by using the existing techniques. The authors discuss solution techniques for problems arising in nanotechnology, bioEM, metamaterials, as well as multiscale problems. They present techniques that utilize recent advances in computer technology, such as parallel architectures, and the increasing need to solve large and complex problems in a time efficient manner by using highly scalable algorithms.

Second International Conference, HPCA 2009, Shanghai, China, August 10-12, 2009, Revised Selected Papers

Circuits and Applications

Fundamentals and Applications

Wireless Power Transfer Algorithms, Technologies and Applications in Ad Hoc Communication Networks

Soft Computing for Problem Solving

Intelligent Communication, Control and Devices

The book generously covers a wide range of aspects and issues related to RFID systems, namely the design of RFID antennas, RFID readers and the variety of tags (e.g. UHF tags for sensing applications, surface acoustic wave RFID tags, smart RFID tags), complex RFID systems, security and privacy issues in RFID applications, as well as the selection of encryption algorithms. The book offers new insights, solutions and ideas for the design of efficient RFID architectures and applications. While not pretending to be comprehensive, its wide coverage may be appropriate not only for RFID novices but also for experienced

This book addresses a broad range of topics on antennas for space applications. First, it introduces the fundamental methodologies of space antenna design, modelling and analysis as well as the state-of-the-art and anticipated future technological developments. Each of the topics discussed are specialized and contextualized to the space sector. Furthermore, case studies are also provided to demonstrate the design and implementation of antennas in actual applications. Second, the authors present a detailed review of antenna designs for some popular applications such as satellite communications, space-borne synthetic aperture radar (SAR), Global Navigation Satellite Systems (GNSS) receivers, science instruments, radio astronomy, small satellites, and deep-space applications. Finally it presents the reader with a comprehensive path from space antenna development basics to specific individual applications. Key Features: Presents a detailed review of antenna designs for applications such as satellite communications, space-borne SAR, GNSS receivers, science instruments, small satellites, radio astronomy, deep-space applications Addresses the space antenna development from different angles, including electromagnetic, thermal and mechanical design strategies required for space qualification Includes numerous case studies to demonstrate how to design and implement antennas in practical scenarios Offers both an introduction for students in the field and an in-depth reference for antenna engineers who develop space antennas This book serves as an excellent

reference for students, researchers and professionals working on antenna and spacecraft system engineering. It also aids engineers technical managers and professionals working on antenna and RF designs. Marketing and business people in satellites, wireless, and electronics area who want to acquire a basic understanding of the technology will also find this book of interest.

Covering the fundamentals applying to all of the radio devices, this is a perfect introduction to the subject for students and professionals. The fast multipole method is one of the most important algorithms in computing developed in the 20th century. Along with the fast multipole method, the boundary element method (BEM) has also emerged as a powerful method for modeling large-scale problems. BEM models with millions of unknowns on the boundary can now be solved on desktop computers using the fast multipole BEM. This is the first book on the fast multipole BEM, which brings together the classical theories in BEM formulations and the recent development of the fast multipole method. Two- and three-dimensional potential, elastostatic, Stokes flow, and acoustic wave problems are covered, supplemented with exercise problems and computer source codes. Applications in modeling nanocomposite materials, bio-materials, fuel cells, acoustic waves, and image-based simulations are demonstrated to show the potential of the fast multipole BEM. Enables students, researchers, and engineers to learn the BEM and fast multipole method from a single source.

Select Proceedings of VCAS 2019

Microwave Journal

The Multilevel Fast Multipole Algorithm (MLFMA) for Solving Large-Scale Computational Electromagnetics Problems

An Introduction Using MATLAB® and Computational Electromagnetics Examples

A Guide to Ship Design, Construction and Operation

This is the book version of a special issue of the International Journal of High Speed Electronics and Systems, reviewing recent work in the field of compound semiconductor integrated circuits. There are fourteen invited papers covering a wide range of applications, frequencies and materials. These papers deal with digital, analog, microwave and millimeter-wave technologies, devices and integrated circuits for wireline fiber-optic lightwave transmissions, and wireless radio-frequency microwave and millimeter-wave communications. In each case, the market is young and experiencing rapid growth for both commercial and military applications. Many new semiconductor technologies compete for these new markets, leading to an alphabet soup of semiconductor materials described in these papers. The book also includes three papers focused on radiation effects and reliability in III-V semiconductor electronics, which are useful for reference and future directions. Moreover, reliability is covered in several papers separately for certain process technologies. Contents: Presentation and Future of High-Speed Compound Semiconductor IC's (T Otsuji); The Transforming MMIC (E J Martinez); Distributed Amplifier for Fiber-Optic Communication Systems (H Shigematsu et al.); Microwave GaN-Based Power Transistors on Large-Scale Silicon Wafers (S Manohar et al.); Radiation Effects in High Speed III-V Integrated Circuits (T R Weatherford); Radiation Effects in III-V Semiconductor Electronics (B D Weaver et al.); Reliability and Radiation Hardness of Compound Semiconductors (S A Kayali & A H Johnston); and other papers. Readership: Engineers, scientists and graduate students working on high speed electronics and systems, and in the area of compound semiconductor integrated circuits.

Electromagnetic Compatibility of Integrated Circuits: Techniques for Low Emission and Susceptibility focuses on the electromagnetic compatibility of integrated circuits. The basic concepts, theory, and an extensive historical review of integrated circuit emission and susceptibility are provided. Standardized measurement methods are detailed through various case studies. EMC models for the core, I/Os, supply network, and packaging are described with applications to conducted switching noise, signal integrity, near-field and radiated noise. Case studies from different companies and research laboratories are presented with in-depth descriptions of the ICs, test set-ups, and comparisons between measurements and simulations. Specific guidelines for achieving low emission and susceptibility derived from the experience of EMC experts are presented.

This book provides a comprehensive treatment of intensely dependent particle beam instabilities in accelerating rings. Written for researchers, the material is also suitable for use as a textbook in an advanced graduate course for students studying accelerator physics. The presentation starts with a brief review of the basic concept of wake potentials and coupling impedances in the vacuum chamber followed by a discussion on static and dynamic solutions of their effects on the particle beams. Special emphasis is placed separately on proton and electron machines. Other special topics of interest covered include Landau damping, BalakinOCNovokhatskyOCStimnov damping, Sachero's integral equations, Landau cavity, saw-tooth instability, Robinson stability criteria, beam loading, transition crossing, two-stream instabilities, and collective instability issues of isochronous rings. After the formulation of an instability, readers are provided a thorough description of one or more experimental observations together with a discussion of the cures for the instability. Although the book is theory oriented, the use of mathematics has been minimized. The presentation is intended to be rigorous and self-contained with nearly all the formulas and equations derived.

Microwave Journal/Microwave Circuit Modeling Using Electromagnetic Field SimulationArtech House

Government Reports Announcements & Index

The Elements of Structures

Proceedings of Integrated Intelligence Enable Networks and Computing

Proceedings of the 8th International Workshop Soft Computing Applications (SOFA 2018), Vol. II

Select Proceedings of VICFCNT 2020

Tools for Computational Finance

This book presents best selected research papers presented at the First International Conference on Integrated Intelligence Enable Networks and Computing (IIENC 2020), held from May 25 to May 27, 2020, at the Institute of Technology, Gopeshwar, India (Government Institute of Uttarakhand Government and affiliated to Uttarakhand Technical University). The book includes papers in the field of intelligent computing. The book covers the areas of machine learning and robotics, signal processing and Internet of things, big data and renewable energy sources.

The Maritime Engineering Reference Book is a one-stop source for engineers involved in marine engineering and naval architecture. In this essential reference, Anthony F. Molland has brought together the work of a number of the world's leading writers in the field to create an inclusive volume for a wide audience of marine engineers, naval architects and those involved in marine operations, insurance and other related fields. Coverage ranges from the basics to more advanced topics in ship design, construction and operation. All the key areas are covered, including ship flotation and stability, ship structures, propulsion, seakeeping and maneuvering. The marine environment and maritime safety are explored as well as new technologies, such as computer aided ship design and remotely operated vehicles (ROVs).

Facts, figures and data from world-leading experts makes this an invaluable ready-reference for those involved in the field of maritime engineering. Professor A.F. Molland, BSc, MSc, PhD, CEng, FRINA, is Emeritus Professor of Ship Design at the University of Southampton, UK. He has lectured ship design and operation for many years. He has carried out extensive research and published widely on ship design and various aspects of ship hydrodynamics. * A comprehensive overview from best-selling authors including Bryan Barrass, Rawson and Tupper, and David Eyles * Covers basic and advanced material on marine engineering and Naval Architecture topics * Have key facts, figures and data to hand in one complete reference book

Contains more than 1400 curves, almost three times as many as in the 1987 edition. The curves are normalized in appearance to aid making comparisons among materials. All diagrams include metric units, and many also include U.S. customary units

The disciplines of financial engineering and numerical computation differ greatly, however computational methods are used in a number of ways across the field of finance. It is the aim of this book to explain how such methods work in financial engineering; specifically the use of numerical methods as tools for computational finance. By concentrating on the field of option pricing, a core task of financial engineering and risk analysis, this book explores a wide range of computational tools in a coherent and focused manner and will be of use to the entire field of computational finance. Starting with an introductory chapter that presents the financial and stochastic background, the remainder of the book goes on to detail computational methods using both stochastic and deterministic approaches. Now in its fifth edition, Tools for Computational Finance has been significantly revised and contains: A new chapter on incomplete markets which links to new appendices on Viscosity solutions and the Dupire equation; Several new parts throughout the book such as that on the calculation of sensitivities (Sect. 3.7) and the introduction of penalty methods and their application to a two-factor model (Sect. 6.7) Additional material in the field of analytical methods including Kim's integral representation and its computation Guidelines for comparing algorithms and judging their efficiency An extended chapter on finite elements that now includes a discussion of two-aspect options Additional exercises, figures and references Written from the perspective of an applied mathematician, methods are introduced as tools within the book for immediate and straightforward application. A 'learning by calculating' approach is adopted throughout this book enabling readers to explore several areas of the financial world. Interdisciplinary in nature, this book will appeal to advanced undergraduate students in mathematics, engineering and other scientific disciplines as well as professionals in financial engineering.

Microwave Circuit Modeling Using Electromagnetic Field Simulation

Applications in Engineering

Advanced Informatics for Computing Research

Techniques for low emission and susceptibility

High Performance Computing and Applications

Proceedings of the 2nd International Conference on Electronic Engineering and Renewable Energy Systems

This book presents novel RIS-Based Smart Radio techniques, targeting at achieving high-quality channel links in cellular communications via design and optimization of the RIS construction. Unlike traditional antenna arrays, three unique characteristics of the RIS will be revealed in this book. First, the built-in programmable configuration of the RIS enables analog beamforming inherently without extra hardware or signal processing. Second, the incident signals can be controlled to partly reflect and partly transmit through the RIS simultaneously, adding more flexibility to signal transmission. Third, the RIS has no digital processing capability to actively send signals nor any radio frequency (RF) components. As such, it is necessary to develop novel channel estimation and communication protocols, design joint digital and RIS-based analog beamforming schemes and perform interference control via mixed reflection and transmission. This book also investigates how to integrate the RIS to legacy communication systems. RIS techniques are further investigated in this book (benefited from its ability to actively shape the propagation environment) to achieve two types of wireless applications, i.e., RF sensing and localization. The influence of the sensing objectives on the wireless signal propagation can be potentially recognized by the receivers, which are then utilized to identify the objectives in RF sensing. Unlike traditional sensing techniques, RIS-aided sensing can actively customize the wireless channels and generate a favorable massive number of independent paths interacting with the sensing objectives. It is desirable to design RIS-based sensing algorithms, and optimize RIS configurations. For the second application, i.e., RIS aided localization, an RIS is deployed between the access point (AP) and users. The AP can then analyze reflected signals from users via different RIS configurations to obtain accurate locations of users. However, this is a challenging task due to the dynamic user topology, as well as the mutual influence between multiple users and the RIS. Therefore, the operations of the RIS, the AP, and multiple users need to be carefully coordinated.

A new RIS-based localization protocol for device cooperation and an RIS configuration optimization algorithm are also required. This book targets researchers and graduate-level students focusing on communications and networks. Signal processing engineers, computer and information scientists, applied mathematicians and statisticians, who work in RIS research and development will also find this book useful.

Proceedings of a NATO ARW held in Vimeiro, Portugal, May 11-15, 1992

The revised and updated second edition of this textbook teaches students to create computer codes used to engineer antennas, microwave circuits, and other critical technologies for wireless communications and other applications of electromagnetic fields and waves. Worked code examples are provided for MATLAB technical computing software.

Annotation This practical "how to" book is an ideal introduction to electromagnetic field-solvers. These most books in this area are strictly theoretical, this unique resource provides engineers with helpful advice on selecting the right tools for their RF (radio frequency) and high-speed digital circuit design work

Nano Dielectric Resonator Antennas for 5G Applications

Proceedings of SocProS 2020, Volume 2

Microwave Discharges

NASA Tech Briefs

Atlas of Stress-strain Curves

Compound Semiconductor Integrated Circuits

This book presents select proceedings of the International Conference on Futuristic Communication and Network Technologies (FCNT 2020) conducted at Vellore Institute of Technology, Chennai. It covers various domains in communication engineering and networking technologies. This volume comprises of recent research in areas like optical communication, optical networks, optics and optical computing, emerging trends in photonics, MEMS and sensors, active and passive RF components and devices, antenna systems and applications, RF devices and antennas for microwave emerging technologies, wireless communication for future networks, signal and image processing, machine learning/AI for networks, internet of intelligent things, network security and blockchain technologies. This book will be useful for researchers, professionals, and engineers working in the core areas of electronics and communication.

We are always surrounded by electromagnetic waves and fields of various spectra. This book explains basic electromagnetic theory with the help of design formulations i.e., mathematical background on antennas along with experimentations, which has made this book unique. The main purpose of this book is to embed mathematical EM theory of dielectric resonator antennas with experimental validation so that understanding of concepts takes place. Initially, basic understanding of philosophy of dielectric resonators has been discussed, then it is supported with mathematical modeling and later same is implemented with its prototype model along with experimentations. The modes theory gives important analysis on currents distribution, impedance analysis and radiation pattern in DRA. Circular polarization can built signal robustness, case studies on circular polarization has been included. Equivalent RLC circuit concept has been introduced.

Challenges of switching from microwave to terahertz has been briefly discussed. Nano DRA will revolutionize the wireless technology. Nano DRA ,Terahertz DRA and Quantum DRA have analyzed and studied.

This book constitutes the thoroughly refereed post-conference proceedings of the Second International Conference on High Performance Computing and Applications, HPCA 2009, held in Shanghai, China, in August 2009. The 71 revised papers presented together with 10 invited presentations were carefully selected from 324 submissions. The papers cover topics such as numerical algorithms and solutions; high performance and grid computing; novel approaches to high performance computing; massive data storage and processing; and hardware acceleration.

The book focuses on the integration of intelligent communication systems, control systems, and devices related to all aspects of engineering and sciences. It contains high-quality research papers presented at the 2nd international conference, ICICCD 2017, organized by the Department of Electronics, Instrumentation and Control Engineering of University of Petroleum and Energy Studies, Dehradun on 15 and 16 April, 2017. The volume broadly covers recent advances of intelligent communication, intelligent control and intelligent devices. The work presented in this book is original research work, findings and practical development experiences of researchers, academicians, scientists and industrial practitioners.

RF MEMS Circuit Design for Wireless Communications

Fast Multipole Boundary Element Method

Futuristic Communication and Network Technologies

ICEERE 2020, 13-15 April 2020, Saldia, Morocco

Numerical Methods for Engineering

Soft Computing Applications