

## ***Microwave Engineering Sanjeev Gupta Khanna Pub***

The book focuses on the integration of intelligent communication systems, control systems, and devices related to all aspects of engineering and sciences. It includes high-quality research papers from the 3rd international conference, ICICCD 2018, organized by the Department of Electronics, Instrumentation and Control Engineering at the University of Petroleum and Energy Studies, Dehradun on 21–22 December 2018. Covering a range of recent advances in intelligent communication, intelligent control and intelligent devices., the book presents original research and findings as well as researchers' and industrial practitioners' practical development experiences of.

The Text Is Based On The Ccir 625-B Monochrome (Black & White) And Pal-B And G Colour Television Standards As Adopted By India And Many Other Countries. The American And French Tv Systems Have Also Been Given Due Coverage While Presenting Various Aspects Of The Subject Starting From Television Camera To The Receiver Picture Tube. Keeping In View The Fact That Colour And Monochrome Telecasts Will Co-Exist In India For At Least A Decade, The Author Has Included Relevant Details And Modern Techniques Of Both The Systems. Conceptually The Book May Be Considered To Have Four Sections. The Initial Chapters (1 To 10) Are Devoted To The Essentials Of Transmission, Reception And Applications Of Television Without Involving Detailed Circuitry. The Next 14 Chapters (11 To 24) Explain Basic Design Considerations And Modern Circuitry Of Various Sections Of The Receiver. Topics Like Tv Games, Cable Television, Cctv, Remote Control, Automatic Frequency Tuning, Automatic Brightness Control, Electronic Touch Tuning Etc. Are Also Discussed. The Third Section (Chapters 25 And 26) Is Exclusively Devoted To The Colour Television Transmission And Reception. All The Three Colour Television Systems Have Been Described. Chapters 27 To 30 Are Devoted To Complete Receiver Circuits-Both Monochrome And Colour, Electronic Instruments Necessary For Receiver Manufacture And Servicing, Alignment Procedure, Fault Finding And Servicing Of Black & White And Colour Receivers. The Complete Text Is Presented In A Way That Students Having Basic Knowledge Of Electronics Will Find No Difficulty In Grasping The Complexities Of Television Transmission And Reception.

This book includes high-quality research papers presented at the Fourth International Conference on Innovative Computing and Communication (ICICC 2021), which is held at the Shaheed Sukhdev College of Business Studies, University of Delhi, Delhi, India, on February 20–21, 2021. Introducing the innovative works of scientists, professors, research scholars, students and industrial experts in the field of computing and communication, the book promotes the transformation of fundamental research into institutional and industrialized research and the conversion of applied exploration into real-time applications.

Part of the McGraw-Hill Core Concepts Series, Microwave Engineering thoroughly covers the basic principles, analysis, design and measurement techniques necessary for an introductory undergraduate or graduate course in microwave engineering. This is a concise less expensive alternative. This series is edited by Dick Dorf.

**Proceedings of First International Conference on Computational Electronics for Wireless Communications**

**Radar Engineering**

**Select Proceedings of TEMT 2019**

**Electrical Machines-I**

**Advances in Electromechanical Technologies**

**Electrical Power Systems**

**ICMISC 2020**

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.

This book includes high-quality papers presented at Proceedings of First International Conference on Computational Electronics for Wireless Communications (ICWC 2021), held at National Institute of Technology, Kurukshetra, Haryana, India, during June 11–12, 2021. The book presents original research work of academics and industry professionals to exchange their knowledge of the state-of-the-art research and development in computational electronics with an emphasis on wireless communications. The topics covered in the book are radio frequency and microwave, signal processing, microelectronics and wireless networks.

The book compiles the research works related to smart solutions concept in context to smart energy systems, maintaining electrical grid discipline and resiliency, computational collective intelligence consisted of interaction between smart devices, smart environments and smart interactions, as well as information technology support for such areas. It includes high-quality papers presented in the International Conference on Intelligent Computing Techniques for Smart Energy Systems organized by Manipal University Jaipur. This book will motivate scholars to work in these areas. The book also prophesies their approach to be used for the business and the humanitarian technology development as research proposal to various government organizations for funding approval.

This book constitutes the refereed proceedings of the First International Conference on Futuristic Trends in Network and Communication Technologies, FTNCT 2018, held in Solan, India, in February 2018. The 37 revised full papers presented were carefully reviewed and selected from 239 submissions. The prime aim of the conference is to invite researchers from different domains of network and communication technologies to a single platform to showcase their research ideas. The selected papers are

organized in topical sections on communication technologies, Internet of Things (IoT), network technologies, and wireless networks.

FUNDAMENTALS OF DIGITAL CIRCUITS

Select Proceedings of ETAEERE 2020

ICICCD 2016

Planar Microwave Engineering

Electronic Communications, 4e

Proceedings of IWPSD 2017

International Conference on Innovative Computing and Communications

This Book Has Been Written Strictly According To The Latest Syllabus Prescribed By U.P. Technical University, Lucknow For Undergraduate Students Of Electronics & Communication Engineering. Its First Chapter Discusses The Microwave Propagation Through Waveguides. The Second Chapter Describes Microwave Cavity Resonators. Third Chapter Deals With Microwave Components. Chapter Four Explains Various Microwave Measurements. The Chapter Five Discusses Limitations Of Conventional Active Devices At Microwave Frequencies And Introduces Various Microwave Tubes And Their Classification. Chapter Six Is Divided Into Three 6A, 6B & 6C And Discusses O-Type (6A, 6B) And M-Type (6C) Tubes. Microwave Semiconductor Devices Have Been Discussed In Chapters Seven To Nine. Microwaves And Their Applications Are Described In An Introduction. Authors Have Taken Special Care In Keeping A Balance Between Mathematical And Physical Approach. Large Number Of Illustrative Diagrams Have Been Incorporated. A Good Number Of Solved Problems, Picture From University Examination Papers, Have Been Included For Reinforcing The Key Concepts.

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.

This book comprises select peer-reviewed papers from the International Conference on Emerging Trends in Electromechanical Technologies & Management (TEMT) 2019. The focus is on current research in interdisciplinary areas of mechanical, electrical, electronics and information technologies, and their management from design to market. The book covers a wide range of topics such as computer integrated manufacturing, additive manufacturing, materials science and engineering, simulation and modelling, finite element analysis, operations and supply chain management, decision sciences, business analytics, project management, and sustainable freight transportation. The book will be of interest to researchers and practitioners of various disciplines, in particular mechanical and industrial engineering.

This comprehensive reference explains the many processes needed for creating radar systems and navigation aids. Selected topics include antennas, radar targets, Doppler radar, atmospheric probing, mathematical preliminaries, hyperbolic navigation, aircraft homing systems, navigation measuring techniques, satellite navigation, and more. Features: \*Explains the many processes needed for creating radar systems and navigation aids \*Topics include antennas, radar targets, Doppler radar, atmospheric probing, and more

Urban Mining and Sustainable Waste Management  
(as Per UPTU Syllabus)

Recent Trends in Communication and Electronics

Chemical Research Faculties

Electronics Fundamentals and Applications

Proceedings of 2nd International Conference on Communication, Computing and Networking

Nanoscience and Technology

**A comprehensive introduction to microwave devices and circuits. Includes both physical and mathematical descriptions and many practical illustrations.**

**About the Book: Electrical power system together with Generation, Distribution and utilization of Electrical Energy by the same author cover almost six to seven courses offered by various universities under Electrical and Electronics Engineering curriculum. Also, this combination has proved highly successful for writing competitive examinations viz. UPSC, NTPC, National Power Grid, NHPC, etc. This book gathers selected research papers presented at the International Conference on Recent Trends in Machine Learning, IOT, Smart Cities & Applications (ICMISC 2020), held on 29-30 March 2020 at CMR Institute of Technology, Hyderabad, Telangana, India. Discussing current trends in machine learning, Internet of things, and smart cities applications, with a focus on multi-disciplinary research in the area of artificial intelligence and cyber-physical systems, this book is a valuable resource for scientists, research scholars and PG students wanting formulate their research ideas and find the future directions in these areas. Further, it serves as a reference work anyone wishing to understand the latest technologies used by practicing engineers around the globe.**

**The Fourth edition of this well-received text continues to provide coherent and comprehensive coverage**

*of digital circuits. It is designed for the undergraduate students pursuing courses in areas of engineering disciplines such as Electrical and Electronics, Electronics and Communication, Electronics and Instrumentation, Telecommunications, Medical Electronics, Computer Science and Engineering, Electronics, and Computers and Information Technology. It is also useful as a text for MCA, M.Sc. (Electronics) and M.Sc. (Computer Science) students. Appropriate for self study, the book is useful even for AMIE and grad IETE students. Written in a student-friendly style, the book provides an excellent introduction to digital concepts and basic design techniques of digital circuits. It discusses Boolean algebra concepts and their application to digital circuitry, and elaborates on both combinational and sequential circuits. It provides numerous fully worked-out, laboratory tested examples to give students a solid grounding in the related design concepts. It includes a number of short questions with answers, review questions, fill in the blanks with answers, multiple choice questions with answers and exercise problems at the end of each chapter.*

## **SIGNALS AND SYSTEMS**

*Intelligent Communication, Control and Devices*

*Proceedings of ICTSES 2018*

*Trends in Computational Intelligence, Security and Internet of Things*

*ICCCN 2018, NITTTR Chandigarh, India*

*Optical and Wireless Technologies*

*Advances in VLSI, Communication, and Signal Processing*

Modern wireless communications hardware is underpinned by RF and microwave design techniques. This insightful book contains a wealth of circuit layouts, design tips, and practical measurement techniques for building and testing practical gigahertz systems. The book covers everything you need to know to design, build, and test a high-frequency circuit. Microstrip components are discussed, including tricks for extracting good performance from cheap materials. Connectors and cables are also described, as are discrete passive components, antennas, low-noise amplifiers, oscillators, and frequency synthesizers. Practical measurement techniques are presented in detail, including the use of network analyzers, sampling oscilloscopes, spectrum analyzers, and noise figure meters. Throughout the focus is practical, and many worked examples and design projects are included. There is also a CD-ROM that contains a variety of design and analysis programs. The book is packed with indispensable information for students taking courses on RF or microwave circuits and for practising engineers.

This comprehensive introduction to Electronic Communications explores fundamental concepts and their state-of-the-art application in radio, telephone, facsimile transmission, television, satellite and fiber optic communications. It provides an explanatory as well as descriptive approach, avoids lengthy mathematical derivations and introduces the use of Mathcad for problem-solving in select areas.

This comprehensive reference text discusses concepts of cognitive radio and the advances in the field of spectrum sensing. This text discusses the concept of cognitive radio for next generation wireless communication and a very critical aspect of cognitive radio - that is, spectrum sensing - in detail. It covers important topics including narrowband spectrum sensing, wideband spectrum sensing, cooperative spectrum sensing, system and channel models, detection algorithms, approximation of decision statistics, and theoretical analysis of detection algorithms in detail. Separate chapters are dedicated to discussing the analysis and use of detection algorithms for narrowband spectrum sensing, wideband spectrum sensing, and cooperative wideband spectrum sensing. Aimed at graduate students and academic researchers in the fields of electrical engineering and electronics and communication engineering, this text: Discusses concepts of cognitive radio and research in spectrum sensing. Presents mathematical analysis of algorithms considering practical environment. Explains novel wideband spectrum sensing algorithms with detailed analysis. Provides mathematical derivations to help readers. Discusses basic spectrum sensing algorithms, from narrowband spectrum sensing to the more advanced wideband spectrum sensing.

The Department of Electronics and Communication Engineering of KIET Group of Institutions, Delhi-NCR organized the 4th International Conference ICCE-2020 during November 28-29, 2020. Information compiled in this book is based on the 114 research papers of excellent quality covering different domains of Electronics and Communication Engineering, Computer Science Engineering, Information Technology, Electrical Engineering, Electronics and Instrumentation Engineering. The subject areas treated in the book are: Satellite, Radar and Microwave Techniques, Secure, Smart, and Reliable Networks, Next Generation Networks, Devices & Circuits, Signal & Image Processing, New Emerging Technologies, having the central focus on Recent Trends in Communication & Electronics (ICCE-2020). In addition, a few themes based on Special Sessions have also been conducted in ICCE-2020. The objective of the book resulting from the 4th International Conference on Recent Trends in Communication & Electronics (ICCE-2020) is to provide a resource for the study and research work for an interested audience comprising of researchers, students, audience, and practitioners in the areas of Communications & Computing Systems.

*Advanced Informatics for Computing Research*

*Proceeding of International Conference on Intelligent Communication, Control and Devices*

*An International Directory*

*Microwave & Radar Engineering*

*Proceedings of OWT 2019*

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

*Proceedings of the International Conference on Recent Trends in Communication and Electronics (ICCE-2020), Ghaziabad, India, 28-29 November, 2020*

*This volume constitutes the refereed proceedings of the Third International Conference on Computational Intelligence,*

Security and Internet of Things, ICCISIoT 2020, held in Agartala, India, in December 2020. Due to the COVID-19 pandemic the conference was held online. The 23 full papers and 4 short papers were carefully reviewed and selected from 113 submissions. The papers are organised according to the following topics: computational intelligence, security, and internet of things.

This book gathers selected high-quality research papers presented at the IconSWM 2018 conference, which explore various aspects of urban mining. In addition, they discuss how to achieve sustainable waste management systems, urban mining, landfill mining, material recovery, circular economy, etc., with the aid of effective waste management practices. Additional topics covered include maximum resource circulation and efficiency, key differences between landfill mining and urban mining, and how urban mining can be combined with the concepts of circular economy and sustainability.

Environmental Science is one of the most important areas of research and study in present time and its application in every aspect of life has also increased. Keeping this in view, almost all Indian Universities have introduced it as a compulsory course. This book is intended to suit the needs of graduate and postgraduate students pursuing environmental studies. To save the natural environment, a good and effective understanding of environmental science is needed. Environmental science is a term that has been widely used in recent years and its manifestations can range from environmental awareness learning through complex and expensive environmental study to operational research studies of environmental education systems.

This book disseminates the current knowledge of semiconductor physics and its applications across the scientific community. It is based on a biennial workshop that provides the participating research groups with a stimulating platform for interaction and collaboration with colleagues from the same scientific community. The book discusses the latest developments in the field of III-nitrides; materials & devices, compound semiconductors, VLSI technology, optoelectronics, sensors, photovoltaics, crystal growth, epitaxy and characterization, graphene and other 2D materials and organic semiconductors.

First International Conference, FTNCT 2018, Solan, India, February 9-10, 2018, Revised Selected Papers

Environmental Science

Engineering Mechanics

ICRCWIP-2014

Spectrum Sensing for Cognitive Radio

Proceedings of ICICCD 2017

Proceedings of the International Conference on Recent Cognizance in Wireless Communication & Image Processing

Microwave Engineering(as Per UPTU Syllabus)New Age International

The book presents high-quality research papers presented at the first international conference, ICICCD 2016, organised by the Department of Electronics, Instrumentation and Control Engineering of University of Petroleum and Energy Studies, Dehradun on 2nd and 3rd April, 2016. The book is broadly divided into three sections: Intelligent Communication, Intelligent Control and Intelligent Devices. The areas covered under these sections are wireless communication and radio technologies, optical communication, communication hardware evolution, machine-to-machine communication networks, routing techniques, network analytics, network applications and services, satellite and space communications, technologies for e-communication, wireless Ad-Hoc and sensor networks, communications and information security, signal processing for communications, communication software, microwave informatics, robotics and automation, optimization techniques and algorithms, intelligent transport, mechatronics system, guidance and navigation, algorithms, linear/non-linear control, home automation, sensors, smart cities, control systems, high performance computing, cognition control, adaptive control, distributed control, prediction models, hybrid control system, control applications, power system, manufacturing, agriculture cyber physical system, network control system, genetic control based, wearable devices, nano devices, MEMS, bio-inspired computing, embedded and real-time software, VLSI and embedded systems, FPGA, digital system and logic design, image and video processing, machine vision, medical imaging, and reconfigurable computing systems.

The book provides insights from the 2nd International Conference on Communication, Computing and Networking organized by the Department of Computer Science and Engineering, National Institute of Technical Teachers Training and Research, Chandigarh, India on March 29-30, 2018. The book includes contributions in which researchers, engineers, and academicians as well as industrial professionals from around the globe presented their research findings and development activities in the field of Computing Technologies, Wireless Networks, Information Security, Image Processing and Data Science. The book provides opportunities for the readers to explore the literature, identify gaps in the existing works and propose new ideas for research.

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.

Proceedings of International Conference on Recent Trends in Machine Learning, IoT, Smart Cities and Applications

ICWC 2021

The Physics of Semiconductor Devices

A Textbook of Engineering Mathematics (For First Year ,Anna University)

Intelligent Computing Techniques for Smart Energy Systems

Advances in Smart Grid and Renewable Energy

This book is written so that it serves as a text book for B.E./B.Tech degree students in general and for the institutions where AICTE model curriculum has been adopted. TOPICS COVERED IN THIS BOOK:- Magnetic field and Magnetic circuit Electromagnetic force and torque D.C. Machines D.C. Machines-Motoring and Generation SALIENT FEATURES:- Self-contained, self-explanatory and simple to follow text. Numerous worked out examples. Well Explained theory parts with illustrations. Exercises, objective type question with answers at the end of each chapter.

This volume presents selected papers from the 3rd International Conference on Optical and Wireless Technologies, conducted from 16th to 17th March, 2019. It focuses on extending the limits of currently used systems encompassing optical and wireless domains, and explores the latest developments in applications like photonics, high speed communication systems and networks, visible light communication, nano-photonics, wireless, and MIMO systems. The proceedings contain high quality scholarly articles, giving insight into the analytical, experimental, and developmental aspects of systems, techniques, and devices in these spheres. This volume will prove useful to researchers and professionals alike.

This comprehensive text on control systems is designed for undergraduate students pursuing courses in electronics and communication engineering, electrical and electronics engineering, telecommunication engineering, electronics and instrumentation engineering, mechanical engineering, and biomedical engineering. Appropriate for self-study, the book will also be useful for AMIE and IETE students. Written in a student-friendly readable manner, the book explains the basic fundamentals and concepts of control systems in a clearly understandable form. It is a balanced survey of theory aimed to provide the students with an in-depth insight into system behaviour and control of continuous-time control systems. All the solved and unsolved problems in this book are classroom tested, designed to illustrate the topics in a clear and thorough way. KEY FEATURES : Includes several fully worked-out examples to help students master the concepts involved. Provides short questions with answers at the end of each chapter to help students prepare for exams confidently. Offers fill in the blanks and objective type questions with answers at the end of each chapter to quiz students on key learning points. Gives chapter-end review questions and problems to assist students in reinforcing their knowledge.

This volume comprises the proceedings of the International Conference on Recent Cognizance in Wireless Communication & Image Processing. It brings together content from academicians, researchers, and industry experts in areas of Wireless Communication and Image Processing. The volume provides a snapshot of current progress in computational creativity and a glimpse of future possibilities. The proceedings include two kinds of paper submissions: (i) regular papers addressing foundation issues, describing original research on creative systems development and modeling; and (ii) position papers describing work-in-progress or research directions for computational creativity. This work will be useful to professionals and researchers working in the core areas of wireless communications and image processing.

Third International Conference, ICCISIoT 2020, Tripura, India, December 29-30, 2020, Proceedings

Futuristic Trends in Network and Communication Technologies

Proceedings of ICICCD 2018

Microwave Engineering

Radar Systems and Radio Aids to Navigation

Fundamentals and Applications

Monochrome and Colour Television

*This book comprises select proceedings of the international conference ETAEERE 2020, and primarily focuses on renewable energy resources and smart grid technologies. The book provides valuable information on the technology and design of power grid integration on microgrids of green energy sources. Some of the topics covered include solar PV array, hybrid microgrid, daylight harvesting, green computing, photovoltaic applications, nanogrid applications, AC/DC/AC converter for wind energy systems, solar photovoltaic panels, PEM fuel cell system, and biogas run dual-fueled diesel engine. The contents of this book will be useful for researchers and practitioners working in the areas of smart grids and renewable energy generation, distribution, and management.*

*This book comprises select proceedings of the International Conference on VLSI, Communication and Signal processing (VCAS 2018). It looks at latest research findings in VLSI design and applications. The book covers a wide range of topics in electronics and communication engineering, especially in the area of microelectronics and VLSI design, communication systems and networks, and image and signal processing. The contents of this book will be useful to researchers and professionals alike.*

*Thermal Engineering*

*Proceedings of ICICC 2021, Volume 2*

*Passive Circuits*

*A Practical Guide to Theory, Measurement, and Circuits*

*Select Proceedings of VCAS 2018*