Basic Electronics By Navneet Kumar Gupta Bing

The book features original papers by active researchers presented at the International Conference on Mobile Radio Communications and 5G Networks. It includes recent advances and upcoming technologies in the field of cellular systems, 2G/2.5G/3G/4G/5G and beyond, LTE, WiMAX, WMAN, and other emerging broadband wireless networks, WLAN, WPAN, and various home/personal networking technologies, pervasive and wearable computing and networking, small cells and femtocell networks, wireless mesh networks, vehicular wireless networks, cognitive radio networks and their applications, wireless multimedia networks, green wireless networks, standardization of emerging wireless technologies, power management and energy conservation techniques.

This book includes high-quality papers presented at the International Conference on Communication, Computing and Electronics Systems 2020, held at the PPG Institute of Technology, Coimbatore, India, on 21–22 October 2020. The book covers topics such as automation, VLSI, embedded systems, integrated device technology, satellite communication, optical communication, RF communication, microwave engineering, artificial intelligence, deep learning, pattern recognition, Internet of Things, precision models, bioinformatics, and

healthcare informatics.
Advanced Functional Solid Catalysts for Biomass Valorization presents the
basic concepts in catalysis (homogeneous, heterogeneous, and enzymatic) and
the properties of various kinds of heterogeneous solid catalysts, including their
structure, porosity, particle size, BET surface area, acid-base, and redox
properties. Useful information about biorefineries, types of biomass feedstocks,
their structures and properties as well as about several potential catalytic routes
for biomass upgrading to useful fuels and chemicals is provided in this book.
Importantly, this book covers the most recent developments toward
functionalization of various solid catalysts, optimization of catalysts' properties,
developing cascade catalytic strategies, exploring reaction
kinetics/mechanisms, and evaluating catalysts' stability/reusability during
biomass upgrading. Current challenges and opportunities for the future
biorefineries as well as for the design of advanced functional solid catalysts are
critically discussed. Describes catalysis as a promising technology for the
development of eco-friendly and economically viable strategies for several
important energy and environmental applications. Covers heterogeneous solid
catalysts because of their versatile benefits in terms of catalysts' synthesis,
production cost, stability, and reusability as compared to homogeneous liquid
catalysts. Provides promising strategies for the design of new catalytic

materials, such as carbon materials, metal–organic frameworks, zeolites, and mesoporous silicas. Describes functional solid catalysts for developing one-pot cascade processes for efficient biomass valorization and other vital chemical transformations.

Recent Trends in Communication, Computing, and ElectronicsSelect Proceedings of IC3E 2018Springer

Materials, Processes, Integration and Reliability in Advanced Interconnects for Micro- and Nanoelectronics: Volume 990

Proceedings of International Conference on ICT for Sustainable Development

Optical and Wireless Technologies

International Conference on Communication, Computing and Electronics Systems

Multiscale Modelling of Advanced Materials

Mobile Radio Communications and 5G Networks

Applied Speech Processing

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.

This volume covers the recent advances and research on the modeling and simulation of materials. The primary aim is to take the reader through the mathematical analysis to the theories of electricity and magnetism using multiscale modelling, covering a variety of numerical methods such as finite difference time domain (FDTD), finite element method (FEM) and method of moments. The book also introduces the multiscale Green's function (GF) method for static and dynamic modelling and simulation results of modern advanced nanomaterials, particularly the two-dimensional (2D) materials. This book will be of interest to researchers and industry professionals working on advanced materials. Published for more than 24 years, there is no substitute for the Worldwide Government Directory, which allows users to identify and reach 32,000 elected and appointed officials in 201 countries, plus the European Union. Extensive coverage that includes over 1,800 pages of executive, legislative and political branches; heads of state, ministers, deputies, secretaries and spokespersons as well as state agencies, diplomats and senior level defense officials. It also covers the leadership of more than 100 international organizations. World Government contact information that includes phone numbers and email. Listings include: Name, addresses, telephone and fax numbers, email and web addresses Titles Hierarchical arrangements defining state structures
Biopolymer-Based Formulations: Biomedical and Food Applications presents the

latest advances in the synthesis and characterization of advanced biopolymeric formulations and their state-of-the-art applications across biomedicine and food science. Sections cover the fundamentals, applications, future trends, environmental, ethical and medical considerations, and biopolymeric architectures that are organized in nano, micro and macro scales. The final section of the book focuses on novel applications and recent developments. This book is an essential resource for researchers, scientists and advanced students in biopolymer science, polymer science, polymer chemistry, polymer composites, plastics engineering, biomaterials, materials science, biomedical engineering, and more. It will also be of interest to R&D professionals, scientists and engineers across the plastics, food, biomedical and pharmaceutical industries. Provides in-depth coverage of methods for the characterization of the physical properties of biopolymeric architectures Supports a range of novel applications, including scaffolds, implant coatings, drug delivery, and nutraceutical encapsulation systems Includes the use of experimental data and mathematical modeling, thus enabling the reader to analyze and compare the properties of different polymeric gels
Handbook of Water Resources Management: Discourses, Concepts and Examples
Security and Privacy-Preserving Techniques in Wireless Robotics
Proceedings of ICCCES 2020
Biomedical and Food Applications
From Perspective Towards Reality
Select Proceedings of IC3E 2018

Symposium Held April 10-12, 2007, San Francisco, California, U.S.A.
This book presents the proceedings of the International Conference on Recent Trends in Materials and Devices, which was conceived as a major contribution to large-scale efforts to foster Indian research and development in the field in close collaboration with the community of non-resident Indian researchers from all over the world. The research articles collected in this volume - selected from among the submissions for their intrinsic quality and originality, as well as for their potential value for further collaborations - document and report on a wide range of recent and significant results for various applications and scientific developments in the areas of Materials and Devices. The technical sessions covered include photovoltaics and energy storage, semiconductor materials and devices, sensors, smart and polymeric materials, optoelectronics, nanotechnology and nanomaterials, MEMS and NEMS, as well as emerging technologies. This book contains the latest research work presented at the International Conference on Computing and Communication Systems (I3CS 2020) held at North-Eastern Hill University (NEHU), Shillong, India. The book presents original research results, new ideas and practical development experiences which concentrate on both theory and practices. It includes papers from all areas of information technology, computer science, electronics and communication engineering written by researchers, scientists, engineers and scholar students and experts from India and abroad.
The wide gap between the existing security solutions and the actual practical deployment in smart manufacturing, smart home, and remote environments (with respect to wireless robotics) is one of the major reasons why we require novel strategies, mechanisms, architectures, and frameworks. Furthermore, it is also important to access and understand the different level of vulnerabilities and attack vectors in Wireless Sensor Network (WSN) and Wireless Robotics. This book includes an in-depth explanation of a secure and dependable Wireless Robotics (WR) architecture, to ensure confidentiality, authenticity, and availability.

Features Blockchain technology for securing data at end/server side Emerging technologies/networking, like Cloud, Edge, Fog, etc., for communicating and storing data (securely). Various open issues, challenges faced in this era towards wireless robotics, including several future research directions for the future. Several real world's case studies are included Chapters on ethical concerns and privacy laws, i.e., laws for service providers Security and privacy challenges in wireless sensor networks and wireless robotics The book is especially useful for academic researchers, undergraduate students, postgraduate students, and industry researchers and professionals.

Right to Information Act is a unique act empowering the citizens of India and promote transparency and accountability in the working of the government. It applies to all states and Union Territories except Jammu and Kashmir. It has replaced the Freedom for Information Act. Every citizen of India should have the knowledge of this act; so that he/she is not coerced by the government. It is specially formulated in order to preserve the sanctity of democracy of the people. The act helps contain corruption and makes democracy work for the people in the real sense. An informed person is equipped to keep necessary vigil on the working of the government. Therefore; it is essential to have proper knowledge regarding it. At times the officers themselves find it difficult to decide upon. In order to help them easily find the decisions; they have been listed subject and section-wise. The book serves as a ready-reckoner of RTI Act.

TFET Integrated Circuits

Electronics Projects Vol. 15

Proceedings ICRTMD 2015

Definition, Characteristics, Architecture, Enabling Technologies, Application & Future Challenges

Recent Trends in Communication, Computing, and Electronics

Advances in Communication, Devices and Networking

Chemoinformatics and Bioinformatics in the Pharmaceutical Sciences
The MRS Symposium Proceeding series is an internationally recognised reference suitable for researchers and practitioners. Sustainable Materials for Next Generation Energy Devices: Challenges and Opportunities presents the latest state-of-the-art knowledge and innovation related to environmentally-friendly functional materials that can be developed for, and employed in, producing a feasible next generation of energy storage and conversion devices. The book is broken up into three sections, covering Energy Storage, Energy Conversion and Advanced Concepts. It will be an important reference for researchers, engineers and students who want to gain extensive knowledge in green and/or sustainable functional materials and their applications. Provides a concise resource for readers interested in sustainable and green functional materials for energy conversion and storage devices Emphasizes sustainable and green concepts in the design of energy devices based on renewable functional materials Presents a survey of both the challenges and opportunities available for renewable functional materials in the development of energy devices Applied Speech Processing: Algorithms and Case Studies is

concerned with supporting and enhancing the utilization of speech analytics in several systems and real-world activities, including sharing data analytics related information, creating collaboration networks between several participants, and the use of video-conferencing in different application areas. The book provides a well-standing forum to discuss the characteristics of the intelligent speech signal processing systems in different domains. The book is proposed for professionals, scientists, and engineers who are involved in new techniques of intelligent speech signal processing methods and systems. It provides an outstanding foundation for undergraduate and post-graduate students as well. Includes basics of speech data analysis and management tools with several applications, highlighting recording systems Covers different techniques of big data and Internet-of-Things in speech signal processing, including machine learning and data mining Offers a multidisciplinary view of current and future challenges in this field, with extensive case studies on the design, implementation, development and management of intelligent systems, neural networks, and related machine learning techniques for speech signal processing

This volume contains 88 papers presented at CSI 2013: 48th Annual Convention of Computer Society of India with the theme "ICT and Critical Infrastructure". The convention was held during 13th –15th December 2013 at Hotel Novotel Varun Beach, Visakhapatnam and hosted by Computer Society of India, Vishakhapatnam Chapter in association with Vishakhapatnam Steel Plant, the flagship company of RINL, India. This volume contains papers mainly focused on Computational Intelligence and its applications, Mobile Communications and social Networking, Grid Computing, Cloud Computing, Virtual and Scalable Applications, Project Management and Quality Systems and Emerging Technologies in hardware and Software.
Textbook of Neurology
Basic Electronics
The Physics of Semiconductor Devices
Advanced Functional Solid Catalysts for Biomass Valorization
Smart Computing
Solid State
Handbook of Neurological Examination
The Internet of things refers to a type of network to connect anything with the

Internet-based on stipulated protocols through information sensing equipment to conduct information exchange and communications to achieve smart recognitions, positioning, tracking, monitoring, and administration. In this paper, we briefly discussed what IoT is, how IoT enables different technologies, its architecture, characteristics & applications, IoT functional view & what are the future challenges for IoT.

This book presents selected research papers on current developments in the fields of soft computing and signal processing from the Third International Conference on Soft Computing and Signal Processing (ICSCSP 2020). The book covers topics such as soft sets, rough sets, fuzzy logic, neural networks, genetic algorithms and machine learning and discusses various aspects of these topics, e.g., technological considerations, product implementation and application issues.

This book describes the physical operation of the Tunnel Field-effect Transistor (TFET) and circuits built with this device. Whereas the majority of publications on TFETs describe in detail the device, its characteristics, variants and performance, this will be the first book addressing TFET integrated circuits (TFET ICs). The authors describe the peculiarities of TFET ICs and their differences with MOSFETs. They also develop and analyze a number of logic circuits and memories. The discussion also includes complex circuits combining CMOS and TFET, as well

as a potential fabrication process in Silicon.

This book comprises select proceedings of the 4th International Conference on Optical and Wireless Technologies (OWT 2020). The contents of this volume focus on research carried out in the areas of Optical Communication, Optoelectronics, Optics, Wireless Communication, Wireless Networks, Sensors, Mobile Communications and Antenna and Wave Propagation. The volume also explores the combined use of various optical and wireless technologies in next generation applications, and their latest developments in applications like photonics, high speed communication systems and networks, visible light communication, nanophotonics, wireless and MIMO systems. This book will serve as a useful reference to scientists, academicians, engineers and policy-makers interested in the field of optical and wireless technologies.

Sensors and Biosensors, MEMS Technologies and its Applications

ASIA Major Electronic & Electrical Equipment Manufacturers Directory

Recent Trends in Materials and Devices

Proceedings of ICCDN 2018

Carbon Nanomaterial Electronics: Devices and Applications

Hosted by CSI Vishakapatnam Chapter

Proceedings of the 9th ICIECE 2021

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. Understanding the recent developments in renewable energy is crucial for a range of fields in today's society. As environmental awareness and the need for a more sustainable future continues to grow, the uses of renewable energy, particularly in areas such as smart grid, must be considered and studied thoroughly to be implemented successfully and move society toward a more sustainable future. Optimal

Planning of Smart Grid With Renewable Energy Resources offers a detailed guide to the new problems and opportunities for sustainable growth in engineering by focusing on modeling diverse problems occurring in science and engineering as well as novel effective theoretical methods and robust optimization theories, which can be used to analyze and solve multiple types of problems. Covering topics such as electric drives and energy systems, this publication is ideal for researchers, academicians, industry professionals, engineers, scholars, instructors, and students.
MACHINE LEARNING TECHNIQUES AND ANALYTICS FOR CLOUD SECURITY This book covers new methods, surveys, case studies, and policy with almost all machine learning techniques and analytics for cloud security solutions The aim of Machine Learning Techniques and Analytics for Cloud Security is to integrate machine learning approaches to meet various analytical issues in cloud security. Cloud security with ML has long-standing challenges that require methodological and

theoretical handling. The conventional cryptography approach is less applied in resource-constrained devices. To solve these issues, the machine learning approach may be effectively used in providing security to the vast growing cloud environment. Machine learning algorithms can also be used to meet various cloud security issues, such as effective intrusion detection systems, zero-knowledge authentication systems, measures for passive attacks, protocols design, privacy system designs, applications, and many more. The book also contains case studies/projects outlining how to implement various security features using machine learning algorithms and analytics on existing cloud-based products in public, private and hybrid cloud respectively. Audience Research scholars and industry engineers in computer sciences, electrical and electronics engineering, machine learning, computer security, information technology, and cryptography.
This book brings together selective and specific chapters on nanoscale carbon and applications, thus making it unique due

to its thematic content. It provides access to the contemporary developments in carbon nanomaterial research in electronic applications. Written by professionals with thorough expertise in similar broad area, the book is intended to address multiple aspects of carbon research in a single compiled edition. It targets professors, scientists and researchers belonging to the areas of physics, chemistry, engineering, biology and medicine, and working on theory, experiment and applications of carbon nanomaterials.

Proceedings of IWPSD 2017

The Epic (for Children)

ICCWC 2021

Innovations in Electronics and Communication Engineering

Internet of Things-IoT

Mechanical and Electronics Engineering

Optimal Planning of Smart Grid With Renewable Energy Resources

The two volumes of this book collect high-quality peer-reviewed research papers presented in the International Conference on ICT for Sustainable Development (ICT4SD 2015) held at Ahmedabad,

India during 3 – 4 July 2015. The book discusses all areas of Information and Communication Technologies and its applications in field for engineering and management. The main focus of the volumes are on applications of ICT for Infrastructure, e-Governance, and contemporary technologies advancements on Data Mining, Security, Computer Graphics, etc. The objective of this International Conference is to provide an opportunity for the researchers, academicians, industry persons and students to interact and exchange ideas, experience and expertise in the current trend and strategies for Information and Communication Technologies.

This book presents select papers from the International Conference on Emerging Trends in Communication, Computing and Electronics (IC3E 2018). Covering the latest theories and methods in three related fields – electronics, communication and computing, it describes cutting-edge methods and applications in the areas of signal and image processing, cyber security, human-computer interaction, machine learning, electronic devices, nano-electronics, wireless sensor networks, antenna and wave propagation, and mobile communication. The contents of this book will be beneficial to students, researchers, and professionals working in the field of networks and communications.

The Mahabarata is one of the most widely read epics. How can we deprive our children of the opportunity to read this ancient classic literature? This book keeps in mind the age, interest and comprehension of our young readers. The original Mahabarata is a wonderful epic with many heroic characters, dramatic incidents and popular legends. The authors have attempted to select the characters and incidents with a view to capturing the imagination of the young readers. Written in simple and lucid language, this narrative is an edited version of the great epic. The appendices will make the reading and comprehension of the Mahabarata easier and more interesting. And of course, the colourful and attractive pictures on every page will add to the beauty of this publication.

Aims of the Book:The foremost and primary aim of the book is to meet the requirements of students pursuing following courses of study:1.Diploma in Electronics and Communication Engineering(ECE)-3-year course offered by various Indian and foreign polytechnics and technical institutes like city and guilds of London Institute(CGLI).2.B.E.(Elect.& Comm.)-4-year course offered by various Engineering Colleges.efforts have beenmade to cover the papers:Electronics-I & II and Pulse and Digital Circuits.3.B.Sc.(Elect.)-3-Year vocationalised course recently introduced by Approach.

IEEE Standards

IETE Technical Review

Proceedings of OWT 2020

I3CS 2020, NEHU, Shillong, India

ICT and Critical Infrastructure: Proceedings of the 48th Annual Convention of Computer Society of India- Vol I

Mahabharata

Proceedings of the 1st International Conference on Smart Machine Intelligence and Real-Time Computing (SmartCom 2020), 26-27 June 2020, Pauri, Garhwal, Uttarakhand, India

This book includes high-quality papers presented at Proceedings of First International Conference on Computational Electronics for Wireless Communications (ICCWC 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.

Chemoinformatics and Bioinformatics in the Pharmaceutical Sciences brings together two very important fields in pharmaceutical sciences that have been mostly seen as diverging from each other: chemoinformatics and bioinformatics. As developing drugs is an expensive and lengthy process, technology can improve the cost, efficiency and speed at which new drugs can be discovered and tested. This book presents some of the growing advancements of technology in the field of drug development and how the computational approaches explained here can reduce the financial and experimental burden of the drug discovery process. This book will be useful to pharmaceutical science researchers and students who need basic knowledge of computational techniques relevant to their projects. Bioscientists, bioinformaticians, computational scientists, and other stakeholders from industry and academia will also find this book helpful. Provides practical information on how to choose and use appropriate computational tools Presents the wide, intersecting fields of chemo-bio-informatics in an easily-accessible format Explores the fundamentals of the emerging field of chemoinformatics and bioinformatics

This book provides an overview of facts, theories and methods from hydrology, geology, geophysics, law, ethics, economics, ecology, engineering, sociology, diplomacy and many other disciplines with relevance for concepts and practice of water resources management. It provides comprehensive, but also critical reading material for all communities involved in the ongoing water discourses and debates. The book refers to case studies in the form of boxes, sections, or as entire chapters. They illustrate

success stories, but also lessons to be remembered, to avoid repeating the same mistakes. Based on consolidated state-of-the-art knowledge, it has been conceived and written to attract a multidisciplinary audience. The aim of this handbook is to facilitate understanding between the participants of the international water discourse and multi-level decision making processes. Knowing more about water, but also about concepts, methods and aspirations of different professional, disciplinary communities and stakeholders professionalizes the debate and enhances the decision making.

The field of SMART technologies is an interdependent discipline. It involves the latest burning issues ranging from machine learning, cloud computing, optimisations, modelling techniques, Internet of Things, data analytics, and Smart Grids among others, that are all new fields. It is an applied and multi-disciplinary subject with a focus on Specific, Measurable, Achievable, Realistic & Timely system operations combined with Machine intelligence & Real-Time computing. It is not possible for any one person to comprehensively cover all aspects relevant to SMART Computing in a limited-extent work. Therefore, these conference proceedings address various issues through the deliberations by distinguished Professors and researchers. The SMARTCOM 2020 proceedings contain tracks dedicated to different areas of smart technologies such as Smart System and Future Internet, Machine Intelligence and Data Science, Real-Time and VLSI Systems, Communication and Automation Systems. The proceedings can be used as an advanced reference for research and for courses in smart technologies taught at graduate level.

Proceedings of the International Conference on Computing and Communication

Systems
Soft Computing and Signal Processing
Algorithms and Case Studies

ICT4SD 2015 Volume 1
Proceedings of 3rd ICSCSP 2020, Volume 2
Proceedings of MRCN 2020