High Voltage Engineering By Anuradha Publications

High Voltage Direct Current TransmissionMicroprocessor and MicrocontrollerIEEE Membership DirectoryFundamentals of Software EngineeringApplications of Artificial Intelligence Techniques in EngineeringComputer & Control AbstractsHardware-software Co-design for Embedded SystemsDissertation Abstracts InternationalIndian Engineering & Industries RegisterAnnual Report of the CouncilBiomaterials and Nanotechnology for Tissue EngineeringInternational Aerospace AbstractsCommonwealth Universities YearbookProceedings of International Conference on Artificial Intelligence, Smart Grid and Smart City ApplicationsHigh Voltage EngineeringElectrical Drives and ControlsNetwork Theory and Filter DesignEDN, Electrical Design NewsMicroscopy Applied to Materials Sciences and Life SciencesAdvances in VLSI, Communication, and Signal ProcessingArtificial Intelligence and Evolutionary Algorithms in Engineering SystemsSmart Grid ControlApplications of Computing, Automation and Wireless Systems in Electrical EngineeringLow and High Dielectric Constant MaterialsAdvances in Smart Grid Power SystemUniversities HandbookExtended AbstractsAnalysis and Characterization of GaAs MOSFET with High-K Dielectric MaterialGuide to Indian Periodical LiteratureScientific and Technical Aerospace ReportsHigh Voltage Direct Current TransmissionKothari's Economic and Industrial Guide of IndiaUltra-High Voltage AC/DC GridsBasic Civil and Mechanical EngineeringHigh Voltage EngineeringNewsletterIndian Books in PrintJJAPIndian Science AbstractsWho's who in Frontier Science and Technology

High Voltage Direct Current Transmission

Microprocessor and Microcontroller

Due to the complexity, and heterogeneity of the smart grid and the high volume of information to be processed, artificial intelligence techniques and computational intelligence appear to be some of the enabling technologies for its future development and success. The theme of the book is “Making pathway for the grid of future” with the emphasis on trends in Smart Grid, renewable interconnection issues, planning-operation-control and reliability of grid, real time monitoring and protection, market, distributed generation and power distribution issues, power electronics applications, computer-IT and signal processing applications, power apparatus, power engineering education and industry-institute collaboration. The primary objective of the book is to review the current state of the art of the most relevant artificial intelligence techniques applied to the different issues that arise in the smart grid development.

IEEE Membership Directory

Fundamentals of Software Engineering

Applications of Artificial Intelligence Techniques in Engineering

Computer & Control Abstracts

Hardware-software Co-design for Embedded Systems

Dissertation Abstracts International

Nanotechnology and high-end characterization techniques have highlighted the importance of the material choice for the success of tissue engineering. A paradigm shift has been seen from conventional passive materials as scaffolds to smart multi-functional materials that can mimic the complex intracellular milieu more effectively. This book presents a detailed overview of the rationale involved in the choice of materials for regeneration of different tissues and the future directions in this fascinating area of materials science with specific chapters on regulatory challenges & ethics; tissue engineered medical products.

Indian Engineering & Industries Register

The UHV transmission has many advantages for new power networks due to its capacity, long distance potential, high efficiency, and low loss. Development of UHV transmission technology is led by infrastructure development and renewal, as well as smart grid developments, which can use UHV power networks as the transmission backbone for hydropower, coal, nuclear power and large renewable energy bases. Over the years, State Grid Corporation of China has developed a leading position in UHV core technology R&D, equipment development, plus construction experience, standards development and operational management. SGCC built the most advanced technology 'two AC and two DC' UHV projects with the highest voltage-class and largest transmission capacity in the world, with a cumulative power transmission of 10TWh. This book comprehensively summarizes the research achievement, theoretical innovation and engineering practice in UHV power grid construction in China since 2005. It covers the key technology and parameters used in the design of the UHV transmission network, shows readers the technical problems State Grid encountered during the construction, and the solution they come up with. It also introduces key technology like UHV series compensation, DC converter valve, and the systematic standards and norms. Discusses technical characteristics and advantages of using of AC/DC transmission system Includes applications and technical standards of UHV technologies Provides insight and case studies into a technology area that is developing worldwide Introduces the technical difficulties encountered in design and construction phase and provides solutions

Annual Report of the Council

Biomaterials and Nanotechnology for Tissue Engineering

International Aerospace Abstracts

This book discusses key concepts, challenges and potential solutions in connection with established and emerging topics in advanced computing, renewable energy and network communications. Gathering edited papers presented at MARC 2018 on July 19, 2018, it will help researchers pursue and promote advanced research in the fields of electrical engineering, communication, computing and manufacturing.

Commonwealth Universities Yearbook

Proceedings of International Conference on Artificial Intelligence, Smart Grid and Smart City Applications

High Voltage Engineering

This new volume, Microscopy Applied to Materials Sciences and Life Sciences. focuses on recent theoretical and practical advances in polymers and their blends, composites, and nanocompos¬ites related to their microscopic characterization. It highlights recent accomplishments and trends in the field of polymer nanocomposites and filled polymers related to microstructural characterization. This book gives an insight and better understanding into the development in microscopy as a tool for characterization. The book emphasizes recent research work in the field of microscopy in life sciences and materials sciences mainly related to its synthesis, characterizations, and applications. The book explains the application of microscopic techniques in life sciences and materials sciences, and their applications and state of current research carried out. The book aims to foster a better understanding of the properties of polymer composites by describing new techniques to measure microstructure property relationships and by utilizing techniques and expertise developed in the conventional filled polymer composites. Characterization techniques, particularly microstructural characterization, have proven to be extremely difficult because of the range of length-scales associated with these materials. Topics include: •Instrumentation and Techniques: advances in scanning probe microscopy, SEM, TEM, OM. 3D imaging and tomography, electron diffraction techniques and analytical microscopy, advances in sample preparation techniques in-situ microscopy, correlative microscopy in life and material sciences, low voltage electron microscopy. •Life Sciences: Structure and imaging of biomolecules, live cell imaging, neurobiology, organelles and cellular dynamics, multi-disciplinary approaches for medical and biological sciences, microscopic application in plants, microorganism and environmental science, super resolution microscopy in biological sciences. •Materials Sciences: materials for nanotechnology, metals alloys and inter-metallic, ceramics, composites, minerals and microscopy in cultural heritage, thin films, coatings, surfaces and interfaces, carbon based materials, polymers and soft materials and self-assembled materials, semiconductors and magnetic materials. Polymers and inorganic nanoparticles. The volume will be of significant interest to scientists working on the basic issues surrounding polymers, nanocomposites, and nanoparticulate-filled polymers, as

well as those working in industry on applied problems, such as processing. Because of the multidisciplinary nature of this research, the book will be valuable to chemists, materials scientists, physicists, chemical engineers, and processing specialists who are involved and interested in the future frontiers of blends.

Electrical Drives and Controls

Presents the latest developments in switchgear and DC/DC converters for DC grids, and includes substantially expanded material on MMC HVDC This newly updated edition covers all HVDC transmission technologies including Line Commutated Converter (LCC) HVDC; Voltage Source Converter (VSC) HVDC, and the latest VSC HVDC based on Modular Multilevel Converters (MMC), as well as the principles of building DC transmission grids. Featuring new material throughout, High Voltage Direct Current Transmission: Converters, Systems and DC Grids, 2nd Edition offers several new chapters/sections including one on the newest MMC converters. It also provides extended coverage of switchgear, DC grid protection and DC/DC converters following the latest developments on the market and in research projects. All three HVDC technologies are studied in a wide range of topics, including: the basic converter operating principles; calculation of losses; system modelling, including dynamic modelling; system control; HVDC protection, including AC and DC fault studies; and integration with AC systems and fundamental frequency analysis. The text includes: A chapter dedicated to hybrid and mechanical DC circuit breakers Half bridge and full bridge MMC: modelling, control, start-up and fault management A chapter dedicated to unbalanced operation and control of MMC HVDC The advancement of protection methods for DC grids Wideband and high-order modeling of DC cables Novel treatment of topics not found in similar books, including SimPowerSystems models and examples for all HVDC topologies hosted by the 1st edition companion site. High Voltage Direct Current Transmission: Converters, Systems and DC Grids, 2nd Edition serves as an ideal textbook for a graduate-level course or a professional development course.

Network Theory and Filter Design

Advances in Smart Grid Power System: Network, Control and Security discusses real world problems, solutions, and best practices in related fields. The book includes executable plans for smart grid systems, their network communications, tactics on protecting information, and response plans for cyber incidents. Moreover, it enables researchers and energy professionals to understand the future of energy delivery systems and security. Covering fundamental theory, mathematical formulations, practical implementations, and experimental testing procedures, this book gives readers invaluable insights into the field of power systems, their quality and reliability, their impact, and their importance in cybersecurity. Includes supporting illustrations and tables along with valuable end of chapter reference sets Provides a working guideline for the design and analysis of smart grids and their applications Features experimental testing procedures in smart grid power systems, communication networks, reliability, and cybersecurity

EDN, Electrical Design News

Microscopy Applied to Materials Sciences and Life Sciences

This book focuses on the role of systems and control. Focusing on the current and future development of smart grids in the generation and transmission of energy, it provides an overview of the smart grid control landscape, and the potential impact of the various investigations presented has for technical aspects of power generation and distribution as well as for human and economic concerns such as pricing, consumption and demand management.

Advances in VLSI, Communication, and Signal Processing

Artificial Intelligence and Evolutionary Algorithms in Engineering Systems

Smart Grid Control

Since the first edition of this book in 1983, HVDC technology has continued to develop and few power systems can now escape its influence. Fully revised, updated and expanded, this second edition builds on its predecessor's coverage of HVDC systems and describes the variety of reasons justifying the use of DC transmission as well as the basic concepts and techniques involved in the AC-DC and DC-AC conversion processes. Updates include the main technical advances of the past 15 years, such as improvements in the ratings and reliability of thyristor valves and other semiconductor devices, more controllable solid state devices, cost reduction techniques and discussion of the widening applications of DC that continue to make HVDC a competitive technology.

Applications of Computing, Automation and Wireless Systems in Electrical Engineering

Lists citations with abstracts for aerospace related reports obtained from world wide sources and announces documents that have recently been entered into the NASA Scientific and Technical Information Database.

Low and High Dielectric Constant Materials

A directory to the universities of the Commonwealth and the handbook of their association.

Advances in Smart Grid Power System

Provides a comprehensive treatment of high voltage engineering fundamentals at the introductory and intermediate levels. It covers: techniques used for generation and measurement of high direct, alternating and surge voltages for general application in industrial testing and selected special examples found in basic research; analytical and numerical calculation of electrostatic fields in simple

practical insulation system; basic ionisation and decay processes in gases and breakdown mechanisms of gaseous, liquid and solid dielectrics; partial discharges and modern discharge detectors; and overvoltages and insulation coordination.

Universities Handbook

This book is designed for course on Basic Civil and Mechanical Engineering. The book closely follows the undergraduate engineering syllabus. The text has been infused with several short answer questions, fill in the blanks and true or false statements which will provide competitive edge to students and prove instrumental in preparation of competitive and university examinations.

Extended Abstracts

Contains papers from a May 2000 symposium, representing the state of the art in areas of dielectric materials science and process integration. Papers are arranged in sections on low and high dielectric constant materials, covering topics such as ammonia plasma passivation effects on properties of post-CMP low-k HSQ, characterization of ashing effects on low-k dielectric films, and electron beam curing of thin film polymer dielectrics. Other subjects include characterization of high-k dielectrics using the non-contact surface charge profiler method, and processing effects and electrical evaluation of ZrO2 formed by RTP oxidation of Zr. Loboda is affiliated with Dow Corning Corporation. c. Book News Inc.

Analysis and Characterization of GaAs MOSFET with High-K Dielectric Material

Guide to Indian Periodical Literature

The book is a collection of high-quality, peer-reviewed innovative research papers from the International Conference on Signals, Machines and Automation (SIGMA 2018) held at Netaji Subhas Institute of Technology (NSIT), Delhi, India. The conference offered researchers from academic and industry the opportunity to present their original work and exchange ideas, information, techniques and applications in the field of computational intelligence, artificial intelligence and machine intelligence. The book is divided into two volumes discussing a wide variety of industrial, engineering and scientific applications of the emerging techniques.

Scientific and Technical Aerospace Reports

High Voltage Direct Current Transmission

Kothari's Economic and Industrial Guide of India

The book is a collection of high-quality peer-reviewed research papers presented in

Proceedings of International Conference on Artificial Intelligence and Evolutionary Algorithms in Engineering Systems (ICAEES 2014) held at Noorul Islam Centre for Higher Education, Kumaracoil, India. These research papers provide the latest developments in the broad area of use of artificial intelligence and evolutionary algorithms in engineering systems. The book discusses wide variety of industrial, engineering and scientific applications of the emerging techniques. It presents invited papers from the inventors/originators of new applications and advanced technologies.

Ultra-High Voltage AC/DC Grids

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.

Basic Civil and Mechanical Engineering

High Voltage Engineering

Newsletter

Indian Books in Print

Scientific Essay from the year 2015 in the subject Engineering - Communication Technology, , course: VLSI Technology, language: English, abstract: Analysis and characterization of the GaAs MOSFET with High-k gate dielectric material and also do the small signal analysis and noise analysis using TCAD tool. In present research work GaAs is employed as substrate material. Band gap of GaAs is about 1.43eV. Lattice constant for GaAS is 5.65A. Substrate doping is 1x10^16 cm-3. HFO2 gate dielectric deposited on GaAs(100) substrate. HFO2 film is 20nm thick. Dielectric constant of HFO2 is order of 20-25. Permittivity (F cm^-2) is 20€0. Band gap (eV) is 4.5-6.0.HFO2 grown by Atomic Layer Deposition on GaAs. The transition metal Au is proposed dopant for GaAs. Source/Drain junction depth is 20nm. Doping levels of drain source are 1e20. Gold is used for gate metal. A working GaAs device is simulated and out performs the Si core device due to its increased mobility. It also decreases leakage current. Solve the problem of Fermi level pinning. So GaAs MOSFET is always better than Si MOSFET.

JJAP

Indian Science Abstracts

Who's who in Frontier Science and Technology

ROMANCE ACTION & ADVENTURE MYSTERY & THRILLER BIOGRAPHIES & HISTORY CHILDREN'S YOUNG ADULT FANTASY HISTORICAL FICTION HORROR LITERARY FICTION NON-FICTION SCIENCE FICTION