

Download free Power semiconductor controlled drives by gopal k dubey (Read Only)

encouraged by the response to the first edition and to keep pace with recent developments fundamentals of electrical drives second edition incorporates greater details on semi conductor controlled drives includes coverage of permanent magnet ac motor drives and switched reluctance motor drives and highlights new trends in drive technology contents were chosen to satisfy the changing needs of the industry and provide the appropriate coverage of modern and conventional drives with the large number of examples problems and solutions provided fundamentals of electrical drives second edition will continue to be a useful reference for practicing engineers and for those preparing for engineering service examinations a comprehensive treatment of the subject of power electronics is provided in this book it deals with the principles of operation of various thyristorised power controllers systematically and explains the important basic concepts for a beginner for advanced readers and practising engineers it covers many topics such as static reactive power compensation power factor control current source inverter time sharing inverter multiphase chopper and harmonic control in pwm inverters presenting current issues in electric motor design installation application and performance this second edition serves as the most authoritative and reliable guide to electric motor utilization and assessment in the commercial and industrial sectors covering topics ranging from motor energy and efficiency to computer aided design and equipment selection this reference assists professionals in all aspects of electric motor maintenance repair and optimization it has been expanded by more than 40 percent to explore the most influential technologies in the field including electronic controls superconducting generators recent analytical tools new computing capabilities and special purpose motors to be accredited a power electronics course should cover a significant amount of design content and include extensive use of computer aided analysis with simulation tools such as spice based upon the authors experience in designing such courses spice for power electronics and electric power second edition integrates a spice simulator with a po artificial intelligence is increasingly finding its way into industrial and manufacturing contexts the prevalence of ai in industry from stock market trading to manufacturing makes it easy to forget how complex artificial intelligence has become engineering provides various current and prospective applications of these new and complex artificial intelligence technologies applications of artificial intelligence in electrical engineering is a critical research book that examines the advancing developments in artificial intelligence with a focus on theory and research and their implications highlighting a wide range of topics such as evolutionary computing image processing and swarm intelligence this book is essential for engineers manufacturers technology developers it specialists managers academicians researchers computer scientists and students this new book demonstrates the usefulness of the switching function in analyzing power electronic circuits in the steady state a procedure is suggested for the effective application of this method for the analysis of all types of power electronic circuits book jacket scientific motivation to publish this book comes from the increased interest in the study of toxoplasmosis showed all over the world though the toxoplasma gondii infection was first discovered in 1908 toxoplasmosis remains a today s research topic a realm of questions and dilemmas that interest both the veterinarians and

the human doctors studies in the field are directed to the epidemiology of the disease the sources of infection epidemiological chains being underlined the important feature in the transmission of this parasite the ability to pass from one intermediate host to another intermediate host without passing through the final host felids an increased prevalence of toxoplasmosis in humans and animals as well as the difficulty of coproscopic diagnosis of toxoplasmosis in cats expensive serological examinations in both animals and humans lack of diagnostic methods accessible to veterinarians in slaughterhouses cultural and culinary differences of human patients which can influence the prevalence of the disease motivate the scientific and practical importance of the proposed book and reveal the importance of this topic for animal and human health so the proposed book will contain informations regarding the etiology and history of toxoplasma gondii infection and also the parasite s morphology and biology this work will contain a very detailed epidemiology of the toxoplasmosis from all over the world and for all species of animals this chapter will include also personal findings of the authors about the toxoplasma gondii seroprevalence in domestic animals from romania in the last part of the book we will present the main methods for toxoplasma diagnosis at the end of the book we will synthesize the main routes for t gondii infection and the recommendations for reducing toxoplasmosis seroprevalence this book presents the select proceedings the 2nd international conference on mechanical and energy technologies icmet 2021 the broad range of topics and issues covered are bulk deformation processes and sheet metal forming composites ceramics and polymers processing corrosion heat treatment microstructure and materials properties energy materials failure and fracture mechanics friction wear tribology and surface engineering functionally graded materials cellular materials low friction and corrosion resistive materials for energy applications lubricants and lubrication machinability and formability of materials material science and engineering and materials for energy storage this book will be useful for students researchers and professionals working in the areas of mechanical and industrial engineering energy technologies and allied fields suitable for undergraduate and postgraduate courses in electrical drives this book covers topics on dynamics and control of electrical drives selection of motor power rating dc induction and synchronous motor drives stepper motor and switched reluctance motor drives permanent magnet ac and brushless dc motor drives and more a study of power semiconductor controlled drives that contain dc induction and synchronous motors discusses the dynamics of motor and load systems open and closed loop drives and thyristor power transistor and gto converters also reviews arc drives brushless and commutatorless dc drives and rectifier controlled dc drives annotation copyrighted by book news inc portland or describes the complete performance details of solid state devices of the thyristor group including gtos and transistor family along with problems and solutions associated with their operation presents both theoretical and mathematical aspects of all types of thyristor converters stipulating the thermal design for their effective utilization plus mathematical analysis contains a variety of numerical examples scores of worked examples review and multiple choice questions contributed papers presented at international conference on power quality assessment of impact held at new delhi on 6 7 nov 2001 this book petroleum nanobiotechnology modern applications for a sustainable future explores the unique fusion of biotechnology and nanotechnology as applied to the different sectors of the oil and gas industry it is a concise resource on the most recent and most up to date bottom up fabrication techniques in petroleum nanobiotechnology covering the advantages of biofabrication over chemical or physical techniques from the point of being more cost effective ecofriendly biocompatibly superior and highly stable the volume covers the important topic of microbial

and phytosynthesis of metal and metal oxide nanoparticles the key applications discussed here include the application of these nanoparticles in different sectors of the oil and gas industry with special emphasis on antimicrobial applications reduction of environmental pollutants and bio upgrading of petroleum and its fractions the discussion of each application is augmented with a critical review of the potential for continued development the book first provides an overview of petroleum microbiology and nanotechnology and proceeds to consider phytosynthesis of metal nanoparticles microbial synthesis of metal nanoparticles biosynthesis of metal oxide nanoparticles nanobiotechnology and mitigation of microbial influenced corrosion in petroleum industry applications of nanobiotechnology in petroleum refining and how nanobiotechnology can be used for petroleum wastewater treatment this book covers the very important principle of nanobiotechnology as applied in the petroleum industry and how it can be used for oil recovery microbial enhanced oil recovery petroleum refinery such as for example desulfurization denitrogenation demetallization biotransformation and bio upgrading bioremediation of oil polluted soil and water mitigation of microbial corrosion and bio fouling toxicity of nano materials and its obstacles upon application nanobiotechnology in petroleum industry and the 17 goals of sustainable development the advantages of the application of nanobiotechnology in the oil industries are enormous and clearly outweigh any negligible cons the success can have a huge impact on the exploration production refining mitigation of corrosion waste management and economics this informative volume will be valuable for petroleum engineers and petroleum microbiologists scientists and researchers concerned with nanotechnology environmental pollution petroleum biotechnology petroleum microbiology petroleum refining and the petroleum industry in general metal contamination in the environment is a persisting global issue the metal reservoirs in the earth have declined due to society's needs and due to uncontrolled mining activities therefore the idea to recover metals from waste streams has emerged in this thesis cost competitive technologies such as adsorption using agro wastes and precipitation using an inverse fluidized bed ifb reactor were investigated with special emphasis on the recovery of base metals groundnut shell showed good potential for metal cu pb and zn removal from artificial neural network modeling the performance of the sulfate reducing bacteria srb was found to be strongly ph dependent the removal efficiency of cu and zn in the ifb at ph 5.0 was 97 electronic waste is a good candidate as secondary metal resource the recovery of cu from computer printed circuited boards pcbs using biogenic sulfide precipitation was investigated as well using this technology cu could be recovered at 0.48 g cu/g pcbs this book presents a holistic view of the complex and dynamic responses of plants to nanoparticles the signal transduction mechanisms involved and the regulation of gene expression further it addresses the phytosynthesis of nanoparticles the role of nanoparticles in the antioxidant systems of plants and agriculture the beneficial and harmful effects of nanoparticles on plants and the application of nanoparticles and nanotubes to mass spectrometry aiming ultimately at an analysis of the metabolomics of plants the growing numbers of inventions in the field of nanotechnology are producing novel applications in the fields of biotechnology and agriculture nanoparticles have received much attention because of the unique physico chemical properties of these compounds in the life sciences nanoparticles are used as smart delivery systems prompting the nobel prize winner p ehrlich to refer to these compounds as magic bullets nanoparticles also play an important role in agriculture as compound fertilizers and nano pesticides acting as chemical delivery agents that target molecules to specific cellular organelles in plants the influence of nanoparticles on plant growth and development however remains to be investigated lastly this book reveals the research gaps that must be bridged in the

years to come in order to achieve larger goals concerning the applications of nanotechnology in the plants sciences in the 21st century nanotechnology has become a rapidly emerging branch of science in the world of physical sciences nanotechnological tools have been exploited for a broad range of applications in recent years nanoparticles have also proven useful in several branches of the life sciences in particular nanotechnology has been employed in drug delivery and related applications in medicine nature by dint of its constitution harbors many unassuming mysteries broadly manifested by its constituent cohorts if physics is the pivot that holds nature and chemistry provides reasons for its existence then the rest is just manifestation nanoscience and technology harbor the congruence of these two core subjects whereby many phenomenon may be studied in the same perspective that nature operates at nanoscale obeying the principles of thermodynamics and supramolecular chemistry is a well understood fact manifested in a variety of life processes bones are restored after a fracture clots potentially leading to cerebral strokes can be dissolved the regeneration of new structures in our system follows a bottom up approach be it a microbe benign or pathogenic plant lower or higher plant parts organs food beneficiaries animal lower higher animal processing wastes these all are found to deliver nanomaterials under amenable processing conditions identically the molecules also seem to obey the thermodynamic principles once they get dissociated ionized and the energy captured in the form of bonding helps in the synthesis of a myriad of nanomaterials this edited volume explores the various green sources of nanomaterial synthesis and evaluates their industrial and biomedical applications with a scope of scaling up it provides useful information to researchers involved in the green synthesis of nanomaterials in fields ranging from medicine to integrated agricultural management since the potential toxicity of silver nanoparticles ag nps has raised serious concerns in the biomaterials and biomedical engineering community silver nanoparticles for antibacterial devices biocompatibility and toxicity brings together the synthesis the physicochemical properties and the biological actions of ag nps as well as the clinical demands for fabricating antibacterial medical devices discussing how to suppress the side effects of nanomaterials and how to impart to them the selective toxicity this book presents the two primary paradigms that have emerged in probing the antibacterial applications of ag nps i e the active attacking releasing way and the conservative defending approach by taking advantage of various short range actions it shows readers how the ways in which ag nps have behaved can be engineered purposively with contributions from leading international experts and extensive references listed in each chapter this volume provides the general principles on controlling the physicochemical behaviors of nanomaterials and managing their toxicity risks this book highlights the implications of nanotechnology and the effects of nanoparticles on agricultural systems their interactions with plants as well as their potential applications as fertilizers and pesticides it also discusses how innovative eco friendly approaches to improve food and agricultural systems lead to increased plant productivity further it offers insights into the current trends and future prospects of nanotechnology along with the benefits and risks and their impact on agricultural ecosystems nanomaterials in agriculture reduce the amount of chemical products sprayed by means of smart delivery of active ingredients minimize nutrient losses in fertilization and increase yields through optimized water and nutrient management there is also huge potential for nanotechnology in the provision of state of the art solutions for various challenges faced by agriculture and society both today and in the future this new volume presents a wealth of practical experience and research on new methodologies and important applications in chemical nanotechnology it also includes small scale nanotechnology related projects that have potential applications in several disciplines of chemistry

and nanotechnology in this book contributions range from new methods to novel applications of existing methods to gain understanding of the material and or structural behavior of new and advanced systems topics cover computational methods in chemical engineering and chemoinformatics studies of some of physico chemical properties of several important nanoalloy clusters the use of 3d reconstruction of nanofibrous membranes nanotechnology research for green engineering and sustainability nanofiltration and carbon nanotubes applications in water treatment and much more this 21st century nanoscience handbook will be the most comprehensive up to date large reference work for the field of nanoscience handbook of nanophysics by the same editor published in the fall of 2010 was embraced as the first comprehensive reference to consider both fundamental and applied aspects of nanophysics this follow up project has been conceived as a necessary expansion and full update that considers the significant advances made in the field since 2010 it goes well beyond the physics as warranted by recent developments in the field key features provides the most comprehensive up to date large reference work for the field chapters written by international experts in the field emphasises presentation and real results and applications this handbook distinguishes itself from other works by its breadth of coverage readability and timely topics the intended readership is very broad from students and instructors to engineers physicists chemists biologists biomedical researchers industry professionals governmental scientists and others whose work is impacted by nanotechnology it will be an indispensable resource in academic government and industry libraries worldwide the fields impacted by nanoscience extend from materials science and engineering to biotechnology biomedical engineering medicine electrical engineering pharmaceutical science computer technology aerospace engineering mechanical engineering food science and beyond the future of agriculture greatly depends on our ability to enhance productivity without sacrificing long term production potential the application of microorganisms such as the diverse bacterial species of plant growth promoting rhizobacteria pgpr represents an ecologically and economically sustainable strategy the use of these bio resources for the enhancement of crop productivity is gaining importance worldwide bacteria in agrobiolgy crop productivity focus on the role of beneficial bacteria in crop growth increased nutrient uptake and mobilization and defense against phytopathogens diverse group of agricultural crops and medicinal plants are described as well as pgpr mediated bioremediation leading to food security this book discusses the latest developments in plant mediated fabrication of metal and metal oxide nanoparticles and their characterization by using a variety of modern techniques it explores in detail the application of nanoparticles in drug delivery cancer treatment catalysis and as antimicrobial agent antioxidant and the promoter of plant production and protection application of these nanoparticles in plant systems has started only recently and information is still scanty about their possible effects on plant growth and development accumulation and translocation of nanoparticles in plants and the consequent growth response and stress modulation are not well understood plants exposed to these particles exhibit both positive and negative effects depending on the concentration size and shape of the nanoparticles the impact on plant growth and yield is often positive at lower concentrations and negative at higher ones exposure to some nanoparticles may improve the free radical scavenging potential and antioxidant enzymatic activities in plants and alter the micro rnas expression that regulate the different morphological physiological and metabolic processes in plant system leading to improved plant growth and yields the nanoparticles also carry out genetic reforms by efficient transfer of dna or complete plastid genome into the respective plant genome due to their miniscule size and improved site specific penetration moreover controlled application of

nanomaterials in the form of nanofertilizer offers a more synchronized nutrient fluidity with the uptake by the plant exposed ensuring an increased nutrient availability this book addresses these issues and many more it covers fabrication of different specific nanomaterials and their wide range application in agriculture sector encompassing the controlled release of nutrients nutrient use efficiency genetic exchange production of secondary metabolites defense mechanisms and the growth and productivity of plants exposed to different manufactured nanomaterials the role of nanofertilizers and nano biosensors for improving plant production and protection and the possible toxicities caused by certain nanomaterials the aspects that are little explored by now have also been generously elucidated materials for biomedical engineering bioactive materials for antimicrobial anticancer and gene therapy offers an up to date perspective on recent research findings regarding the application and use of these materials for disease treatment and prevention various types of currently investigated bioactive materials including therapeutic nanostructures and antimicrobial hydrogels are discussed as are their properties impact and future role in therapeutic applications the book will be extremely useful for new researchers who want to explore more information on the use of bioactive materials or for more experienced researchers who are interested in new trends and specific applications provides knowledge on the range of bioactive materials available enabling the reader to make optimal materials selection decisions contains detailed information on current and proposed applications of the latest bioactive materials to empower readers to design innovative products and processes presents a strong emphasis on chemistry and the physico chemical characterization of these materials and their application in antimicrobial anticancer and gene therapy

Fundamentals of Electrical Drives 2002-06-13

encouraged by the response to the first edition and to keep pace with recent developments fundamentals of electrical drives second edition incorporates greater details on semi conductor controlled drives includes coverage of permanent magnet ac motor drives and switched reluctance motor drives and highlights new trends in drive technology contents were chosen to satisfy the changing needs of the industry and provide the appropriate coverage of modern and conventional drives with the large number of examples problems and solutions provided fundamentals of electrical drives second edition will continue to be a useful reference for practicing engineers and for those preparing for engineering service examinations

Thyristorised Power Controllers 1986

a comprehensive treatment of the subject of power electronics is provided in this book it deals with the principles of operation of various thyristorised power controllers systematically and explains the important basic concepts for a beginner for advanced readers and practising engineers it covers many topics such as static reactive power compensation power factor control current source inverter time sharing inverter multiphase chopper and harmonic control in pwm inverters

Intergrated Systems with Multiploe Techniques 2018-10-03

presenting current issues in electric motor design installation application and performance this second edition serves as the most authoritative and reliable guide to electric motor utilization and assessment in the commercial and industrial sectors covering topics ranging from motor energy and efficiency to computer aided design and equipment selection this reference assists professionals in all aspects of electric motor maintenance repair and optimization it has been expanded by more than 40 percent to explore the most influential technologies in the field including electronic controls superconducting generators recent analytical tools new computing capabilities and special purpose motors

Handbook of Electric Motors 2005-11-02

to be accredited a power electronics course should cover a significant amount of design content and include extensive use of computer aided analysis with simulation tools such as spice based upon the authors experience in designing such courses spice for power electronics and electric power second edition integrates a spice simulator with a po

SPICE for Power Electronics and Electric Power 2020-03-27

artificial intelligence is increasingly finding its way into industrial and manufacturing contexts the prevalence of ai in industry from stock market trading to manufacturing makes it easy to forget how complex artificial intelligence has become engineering provides various current and prospective applications of these new and complex artificial intelligence technologies applications of artificial intelligence in electrical engineering is a critical research book that examines the advancing developments in artificial intelligence with a focus on theory and research and their implications highlighting a wide range of topics such as evolutionary computing image processing and swarm intelligence this book is essential for engineers manufacturers technology developers it specialists managers academicians researchers computer scientists and students

Applications of Artificial Intelligence in Electrical Engineering 2006

this new book demonstrates the usefulness of the switching function in analyzing power electronic circuits in the steady state a procedure is suggested for the effective application of this method for the analysis of all types of power electronic circuits book jacket

The Switching Function 2023-11-06

scientific motivation to publish this book comes from the increased interest in the study of toxoplasmosis showed all over the world though the toxoplasma gondii infection was first discovered in 1908 toxoplasmosis remains a today s research topic a realm of questions and dilemmas that interest both the veterinarians and the human doctors studies in the field are directed to the epidemiology of the disease the sources of infection epidemiological chains being underlined the important feature in the transmission of this parasite the ability to pass from one intermediate host to another intermediate host without passing through the final host felids an increased prevalence of toxoplasmosis in humans and animals as well as the difficulty of coproscopic diagnosis of toxoplasmosis in cats expensive serological examinations in both animals and humans lack of diagnostic methods accessible to veterinarians in slaughterhouses cultural and culinary differences of human patients which can influence the prevalence of the disease motivate the scientific and practical importance of the proposed book and reveal the importance of this topic for animal and human health so the proposed book will contain informations regarding the etiology and history of toxoplasma gondii infection and also the parasite s morphology and biology this work will contain a very detailed epidemiology of the toxoplasmosis from all over the world and for all species of animals this chapter will include also personal findings of the authors about the toxoplasma gondii seroprevalence in domestic animals from romania in the last part of the book we will present the main methods for toxoplasma diagnosis at the end of the book we will synthesize the main routes for t gondii infection and the recommendations for reducing toxoplasmosis seroprevalence

Toxoplasmosis 2022-06-20

this book presents the select proceedings the 2nd international conference on mechanical and energy technologies icmet 2021 the broad range of topics and issues covered are bulk deformation processes and sheet metal forming composites ceramics and polymers processing corrosion heat treatment microstructure and materials properties energy materials failure and fracture mechanics friction wear tribology and surface engineering functionally graded materials cellular materials low friction and corrosion resistive materials for energy applications lubricants and lubrication machinability and formability of materials material science and engineering and materials for energy storage this book will be useful for students researchers and professionals working in the areas of mechanical and industrial engineering energy technologies and allied fields

Advances in Mechanical and Energy Technology 2001

suitable for undergraduate and postgraduate courses in electrical drives this book covers topics on dynamics and control of electrical drives selection of motor power rating dc induction and synchronous motor drives stepper motor and switched reluctance motor drives permanent magnet ac and brushless dc motor drives and more

Fundamentals of Electrical Drives 1995

a study of power semiconductor controlled drives that contain dc induction and synchronous motors discusses the dynamics of motor and load systems open and closed loop drives and thyristor power transistor and gto converters also reviews arc drives brushless and commutatorless dc drives and rectifier controlled dc drives annotation copyrighted by book news inc portland or

Journal of the Institution of Electronics and Telecommunication Engineers 1989

describes the complete performance details of solid state devices of the thyristor group including gtos and transistor family along with problems and solutions associated with their operation presents both theoretical and mathematical aspects of all types of thyristor converters stipulating the thermal design for their effective utilization plus mathematical analysis contains a variety of numerical examples scores of worked examples review and multiple choice questions

Power Semiconductor Controlled Drives 2001

contributed papers presented at international conference on power quality assessment of impact held at new delhi on 6 7 nov 2001

IEEE Membership Directory 1989

this book petroleum nanobiotechnology modern applications for a sustainable future explores the unique fusion of biotechnology and nanotechnology as applied to the different sectors of the oil and gas industry it is a concise resource on the most recent and most up to date bottom up fabrication techniques in petroleum nanobiotechnology covering the advantages of biofabrication over chemical or physical techniques from the point of being more cost effective ecofriendly biocompatibly superior and highly stable the volume covers the important topic of microbial and phytosynthesis of metal and metal oxide nanoparticles the key applications discussed here include the application of these nanoparticles in different sectors of the oil and gas industry with special emphasis on antimicrobial applications reduction of environmental pollutants and bio upgrading of petroleum and its fractions the discussion of each application is augmented with a critical review of the potential for continued development the book first provides an overview of petroleum microbiology and nanotechnology and proceeds to consider phytosynthesis of metal nanoparticles microbial synthesis of metal nanoparticles biosynthesis of metal oxide nanoparticles nanobiotechnology and mitigation of microbial influenced corrosion in petroleum industry applications of nanobiotechnology in petroleum refining and how nanobiotechnology can be used for petroleum wastewater treatment this book covers the very important principle of nanobiotechnology as applied in the petroleum industry and how it can be used for oil recovery microbial enhanced oil recovery petroleum refinery such as for example desulfurization denitrogenation demetallization biotransformation and bio upgrading bioremediation of oil polluted soil and water mitigation of microbial corrosion and bio fouling toxicity of nano materials and its obstacles upon application nanobiotechnology in petroleum industry and the 17 goals of sustainable development the advantages of the application of nanobiotechnology in the oil industries are enormous and clearly outweigh any negligible cons the success can have a huge impact on the exploration production refining mitigation of corrosion waste management and economics this informative volume will be valuable for petroleum engineers and petroleum microbiologists scientists and researchers concerned with nanotechnology environmental pollution petroleum biotechnology petroleum microbiology petroleum refining and the petroleum industry in general

Power Semiconductor Controlled Drives 1992-04

metal contamination in the environment is a persisting global issue the metal reservoirs in the earth have declined due to society s needs and due to uncontrolled mining activities therefore the idea to recover metals from waste streams has emerged in this thesis cost competitive technologies such as adsorption using agro wastes and precipitation using an inverse

fluidized bed ifb reactor were investigated with special emphasis on the recovery of base metals groundnut shell showed good potential for metal cu pb and zn removal from artificial neural network modeling the performance of the sulfate reducing bacteria srb was found to be strongly ph dependent the removal efficiency of cu and zn in the ifb at ph 5.0 was 97% electronic waste is a good candidate as secondary metal resource the recovery of cu from computer printed circuited boards pcbs using biogenic sulfide precipitation was investigated as well using this technology cu could be recovered at 0.48 g cu/g pcbs

Indian Science Abstracts 2003

this book presents a holistic view of the complex and dynamic responses of plants to nanoparticles the signal transduction mechanisms involved and the regulation of gene expression further it addresses the photosynthesis of nanoparticles the role of nanoparticles in the antioxidant systems of plants and agriculture the beneficial and harmful effects of nanoparticles on plants and the application of nanoparticles and nanotubes to mass spectrometry aiming ultimately at an analysis of the metabolomics of plants the growing numbers of inventions in the field of nanotechnology are producing novel applications in the fields of biotechnology and agriculture nanoparticles have received much attention because of the unique physico-chemical properties of these compounds in the life sciences nanoparticles are used as smart delivery systems prompting the nobel prize winner p ehrlich to refer to these compounds as magic bullets nanoparticles also play an important role in agriculture as compound fertilizers and nano pesticides acting as chemical delivery agents that target molecules to specific cellular organelles in plants the influence of nanoparticles on plant growth and development however remains to be investigated lastly this book reveals the research gaps that must be bridged in the years to come in order to achieve larger goals concerning the applications of nanotechnology in the plants sciences in the 21st century nanotechnology has become a rapidly emerging branch of science in the world of physical sciences nanotechnological tools have been exploited for a broad range of applications in recent years nanoparticles have also proven useful in several branches of the life sciences in particular nanotechnology has been employed in drug delivery and related applications in medicine

Indian Books in Print 1997-12-08

nature by dint of its constitution harbors many unassuming mysteries broadly manifested by its constituent cohorts if physics is the pivot that holds nature and chemistry provides reasons for its existence then the rest is just manifestation nanoscience and technology harbor the congruence of these two core subjects whereby many phenomenon may be studied in the same perspective that nature operates at nanoscale obeying the principles of thermodynamics and supramolecular chemistry is a well understood fact manifested in a variety of life processes bones are restored after a fracture clots potentially leading to cerebral strokes can be dissolved the regeneration of new structures in our system follows a bottom up approach be it a microbe benign or pathogenic plant lower or higher plant parts organs food beneficiaries animal lower higher animal processing wastes these all are found to deliver nanomaterials under amenable processing conditions identically the

molecules also seem to obey the thermodynamic principles once they get dissociated ionized and the energy captured in the form of bonding helps in the synthesis of a myriad of nanomaterials this edited volume explores the various green sources of nanomaterial synthesis and evaluates their industrial and biomedical applications with a scope of scaling up it provides useful information to researchers involved in the green synthesis of nanomaterials in fields ranging from medicine to integrated agricultural management

Power Electronics 1999

since the potential toxicity of silver nanoparticles ag nps has raised serious concerns in the biomaterials and biomedical engineering community silver nanoparticles for antibacterial devices biocompatibility and toxicity brings together the synthesis the physicochemical properties and the biological actions of ag nps as well as the clinical demands for fabricating antibacterial medical devices discussing how to suppress the side effects of nanomaterials and how to impart to them the selective toxicity this book presents the two primary paradigms that have emerged in probing the antibacterial applications of ag nps i e the active attacking releasing way and the conservative defending approach by taking advantage of various short range actions it shows readers how the ways in which ag nps have behaved can be engineered purposively with contributions from leading international experts and extensive references listed in each chapter this volume provides the general principles on controlling the physicochemical behaviors of nanomaterials and managing their toxicity risks

Proceedings 1999

this book highlights the implications of nanotechnology and the effects of nanoparticles on agricultural systems their interactions with plants as well as their potential applications as fertilizers and pesticides it also discusses how innovative eco friendly approaches to improve food and agricultural systems lead to increased plant productivity further it offers insights into the current trends and future prospects of nanotechnology along with the benefits and risks and their impact on agricultural ecosystems nanomaterials in agriculture reduce the amount of chemical products sprayed by means of smart delivery of active ingredients minimize nutrient losses in fertilization and increase yields through optimized water and nutrient management there is also huge potential for nanotechnology in the provision of state of the art solutions for various challenges faced by agriculture and society both today and in the future

Proceedings of the Trends in Electronics Conference 2001

this new volume presents a wealth of practical experience and research on new methodologies and important applications in chemical nanotechnology it also includes small scale nanotechnology related projects that have potential applications in several disciplines of chemistry and nanotechnology in this book contributions range from new methods to novel applications of existing methods to gain understanding of the material and or structural behavior of new and advanced systems topics

cover computational methods in chemical engineering and chemoinformatics studies of some of physico chemical properties of several important nanoalloy clusters the use of 3d reconstruction of nanofibrous membranes nanotechnology research for green engineering and sustainability nanofiltration and carbon nanotubes applications in water treatment and much more

International Conference, Power Quality, Assessment of Impact, 6-7 November 2001, New Delhi, India 2022-03-24

this 21st century nanoscience handbook will be the most comprehensive up to date large reference work for the field of nanoscience handbook of nanophysics by the same editor published in the fall of 2010 was embraced as the first comprehensive reference to consider both fundamental and applied aspects of nanophysics this follow up project has been conceived as a necessary expansion and full update that considers the significant advances made in the field since 2010 it goes well beyond the physics as warranted by recent developments in the field key features provides the most comprehensive up to date large reference work for the field chapters written by international experts in the field emphasises presentation and real results and applications this handbook distinguishes itself from other works by its breadth of coverage readability and timely topics the intended readership is very broad from students and instructors to engineers physicists chemists biologists biomedical researchers industry professionals governmental scientists and others whose work is impacted by nanotechnology it will be an indispensable resource in academic government and industry libraries worldwide the fields impacted by nanoscience extend from materials science and engineering to biotechnology biomedical engineering medicine electrical engineering pharmaceutical science computer technology aerospace engineering mechanical engineering food science and beyond

Petroleum Nanobiotechnology 1995

the future of agriculture greatly depends on our ability to enhance productivity without sacrificing long term production potential the application of microorganisms such as the diverse bacterial species of plant growth promoting rhizobacteria pgr represents an ecologically and economically sustainable strategy the use of these bio resources for the enhancement of crop productivity is gaining importance worldwide bacteria in agrobiolgy crop productivity focus on the role of beneficial bacteria in crop growth increased nutrient uptake and mobilization and defense against phytopathogens diverse group of agricultural crops and medicinal plants are described as well as pgr mediated bioremediation leading to food security

Proceedings of 1995 International Conference on Power Electronics and

Drive Systems 1994

this book discusses the latest developments in plant mediated fabrication of metal and metal oxide nanoparticles and their characterization by using a variety of modern techniques it explores in detail the application of nanoparticles in drug delivery cancer treatment catalysis and as antimicrobial agent antioxidant and the promoter of plant production and protection application of these nanoparticles in plant systems has started only recently and information is still scanty about their possible effects on plant growth and development accumulation and translocation of nanoparticles in plants and the consequent growth response and stress modulation are not well understood plants exposed to these particles exhibit both positive and negative effects depending on the concentration size and shape of the nanoparticles the impact on plant growth and yield is often positive at lower concentrations and negative at higher ones exposure to some nanoparticles may improve the free radical scavenging potential and antioxidant enzymatic activities in plants and alter the micro rnas expression that regulate the different morphological physiological and metabolic processes in plant system leading to improved plant growth and yields the nanoparticles also carry out genetic reforms by efficient transfer of dna or complete plastid genome into the respective plant genome due to their miniscule size and improved site specific penetration moreover controlled application of nanomaterials in the form of nanofertilizer offers a more synchronized nutrient fluidity with the uptake by the plant exposed ensuring an increased nutrient availability this book addresses these issues and many more it covers fabrication of different specific nanomaterials and their wide range application in agriculture sector encompassing the controlled release of nutrients nutrient use efficiency genetic exchange production of secondary metabolites defense mechanisms and the growth and productivity of plants exposed to different manufactured nanomaterials the role of nanofertilizers and nano biosensors for improving plant production and protection and the possible toxicities caused by certain nanomaterials the aspects that are little explored by now have also been generously elucidated

Build Your Own Electric Vehicle 1997

materials for biomedical engineering bioactive materials for antimicrobial anticancer and gene therapy offers an up to date perspective on recent research findings regarding the application and use of these materials for disease treatment and prevention various types of currently investigated bioactive materials including therapeutic nanostructures and antimicrobial hydrogels are discussed as are their properties impact and future role in therapeutic applications the book will be extremely useful for new researchers who want to explore more information on the use of bioactive materials or for more experienced researchers who are interested in new trends and specific applications provides knowledge on the range of bioactive materials available enabling the reader to make optimal materials selection decisions contains detailed information on current and proposed applications of the latest bioactive materials to empower readers to design innovative products and processes presents a strong emphasis on chemistry and the physico chemical characterization of these materials and their application in antimicrobial anticancer and gene therapy

IETE Technical Review 1978

Bibliographic Guide to Technology 1988

American Book Publishing Record 2020-02-18

**Metal Removal and Recovery from Mining Wastewater and E-waste
Leachate 1979**

Bibliography of Doctoral Dissertations, 1970-75 1979

Bibliography of Doctoral Dissertations 2015-01-27

Nanotechnology and Plant Sciences 2018-10-24

Exploring the Realms of Nature for Nanosynthesis 2017-05-18

Silver Nanoparticles for Antibacterial Devices 2017-06-14

Nanotechnology 2019-08-05

Chemical Nanoscience and Nanotechnology 2022-01-18

21st Century Nanoscience 2013-06-28

Bacteria in Agrobiolology: Crop Productivity 2019-03-01

Nanomaterials and Plant Potential 1987

Cumulated Index Medicus 1989

Perspectives in Ecology 2019-06-28

Materials for Biomedical Engineering: Bioactive Materials for Antimicrobial, Anticancer, and Gene Therapy

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