

International Journal Of Chemtech Research Vol 3 No 2

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Advances in Biofeedstocks and Biofuels, Volume 1 - Lalit Kumar Singh 2016-12-22

Biofuels production is one of the most extensively studied fields in the energy sector that can provide an alternative energy source and bring the energy industry closer to sustainability. Biomass-based fuel production, or renewable fuels, are becoming increasingly important as a potential solution for man-made climate change, depleted oil reserves, and the dangers involved with hydraulic fracturing (or “fracking”). The price of oil will always be volatile and changeable, and, as long as industry and private citizens around the world need energy, there will be a need for alternative energy sources. The area known as “biofuels and biofeedstocks” is one of the most important and quickly growing pieces of the “energy pie.” But biofuels and biofeedstocks are constantly changing, and new processes are constantly being created, changed, and improved upon. The area is rapidly changing and always innovative. It is important, therefore, that books like the volumes in this series are published and the information widely disseminated to keep the industry informed of the state-of-the-art. This first volume in this groundbreaking new series is a collection of papers from some of the world’s foremost authorities on biofeedstocks and biofuels, covering biofeedstocks and how they are processed. It is a must-have for any engineer, scientist, technician, or student working in this area.

Neutrosophic Sets and Systems, Vol. 46, 2021 - Florentin Smarandache 2021-10-19

Papers on neutrosophic programming, neutrosophic hypersoft set, neutrosophic topological spaces, NeutroAlgebra, NeutroGeometry, AntiGeometry, NeutroNearRings, neutrosophic differential equations, etc.

Neutrosophic Sets and Systems, Vol. 43, 2021 - Florentin Smarandache

“Neutrosophic Sets and Systems” has been created for publications on advanced studies in neutrosophy, neutrosophic set, neutrosophic logic, neutrosophic probability, neutrosophic statistics that started in 1995 and their applications in any field, such as the neutrosophic structures developed in algebra, geometry, topology, etc. In this issue: On Neutrosophic Crisp Sets and Neutrosophic Crisp Mathematical Morphology, New Results on Pythagorean Neutrosophic Open Sets in Pythagorean Neutrosophic Topological Spaces, Comparative Mathematical Model for Predicting of Financial Loans Default using Altman Z-Score and Neutrosophic AHP Methods.

Green Chemistry for Dyes Removal from Waste Water - Sanjay K. Sharma 2015-03-04

The use of synthetic chemical dyes in various industrial processes, including paper and pulp manufacturing, plastics, dyeing of cloth, leather treatment and printing, has increased considerably over the last few years, resulting in the release of dye-containing industrial effluents into the soil and aquatic ecosystems. The textile industry generates high-polluting wastewaters and their treatment is a very serious problem due to high total dissolved solids (TDS), presence of toxic heavy metals, and the non-biodegradable nature of the dyestuffs in the effluent. The chapters in this book provide an overview of the problem and its solution from different angles. These problems and solutions are presented in a genuinely holistic way by world-renowned researchers. Discussed are various promising techniques to remove dyes, including the use of nanotechnology, ultrasound, microwave, catalysts, biosorption, enzymatic treatments, advanced oxidation processes, etc., all of which are “green.” Green Chemistry for Dyes Removal from

Wastewater comprehensively discusses: Different types of dyes, their working and methodologies and various physical, chemical and biological treatment methods employed. Application of advanced oxidation processes (AOPs) in dye removal whereby highly reactive hydroxyl radicals are generated chemically, photochemically and/or by radiolytic/sonolytic means. The potential of ultrasound as an AOP is discussed as well. Nanotechnology in the treatment of dye removal types of adsorbents for removal of toxic pollutants from aquatic systems. Photocatalytic oxidation process for dye degradation under both UV and visible light, application of solar light and solar photoreactor in dye degradation.

International Journal of Advanced Remote Sensing and GIS - Cloud Publications 2012-01-01

International Journal of Advanced Remote Sensing and GIS (IJARSG, ISSN 2320 - 0243) is an open-access peer-reviewed scholarly journal publishes original research papers, reviews, case study, case reports, and methodology articles in all aspects of Remote Sensing and GIS including associated fields. This Journal commits to working for quality and transparency in its publishing by following standard Publication Ethics and Policies.

Neutrosophic Sets and Systems, Vol. 28, 2019 - Florentin Smarandache

“Neutrosophic Sets and Systems” has been created for publications on advanced studies in neutrosophy, neutrosophic set, neutrosophic logic, neutrosophic probability, neutrosophic statistics that started in 1995 and their applications in any field, such as the neutrosophic structures developed in algebra, geometry, topology, etc. Some articles from this issue: Reduction of indeterminacy of gray-scale image in bipolar neutrosophic domain, Single Valued Neutrosophic Coloring, An Integrated Neutrosophic and MOORA for Selecting Machine Tool, Plithogenic Fuzzy Whole Hypersoft Set, Construction of Operators and their Application in Frequency Matrix Multi Attribute Decision Making Technique, Pi-Distance of Rough Neutrosophic Sets for Medical Diagnosis, Machine learning in Neutrosophic Environment: A Survey.

Biomass - Miodrag Darko Matovic 2011-09-09

Biomass has been an intimate companion of humans from the dawn of civilization to the present. Its use as food, energy source, body cover and as construction material established the key areas of biomass usage that extend to this day. Given the complexities of biomass as a source of multiple end products, this volume sheds new light to the whole spectrum of biomass related topics by highlighting the new and reviewing the existing methods of its detection, production and usage. We hope that the readers will find valuable information and exciting new material in its chapters.

Aquaculture and By-Products: Challenges and Opportunities in the Use of Alternative Protein Sources and Bioactive Compounds - 2020-05-11

Aquaculture and By-products: Challenges and Opportunities, Volume 92 in the Advances in Food and Nutrition Research series, explores the potential use of aquaculture and by-products as sources of proteins and bioactive compounds. Alternative extraction techniques to obtain, isolate and purify proteins and bioactive from aquaculture and by-products are thoroughly discussed. Chapters in this new volume include Alternative extraction techniques to obtain, isolate and purify proteins and bioactive from aquaculture and by-products, Development of new food and pharmaceutical products: Nutraceuticals and food additives, Evaluation of the protein and bioactive compound bioaccessibility/bioavailability and cytotoxicity of the

extracts obtained from aquaculture and by-products, and more. Details alternative extraction techniques to obtain, isolate and purify proteins and bioactive from aquaculture and by-products Evaluates the protein and bioactive compound bioaccessibility/bioavailability and cytotoxicity of the extracts Updates on progress in the development of new food and pharmaceutical products, such as nutraceuticals and food additives

Environmental Pollution and Natural Resource Management - Kanchan Deoli Bahukhandi 2022-08-22

This book presents conference articles related to environmental pollution and natural resource management, and environmentally friendly technologies that lead to sustainable development presented in the Conference "Sustainable Management of Environment & Natural Resource Through Innovation in Science and Technology". The book highlights the latest development and innovation in environmental science, technology, and interdisciplinary research to improve the environment and health safety. It includes innovations and improvisations in the broad area of science and technology, natural resource, and environment management. It deliberates on the current burning issues of environment protection management and sustainable development, environmental pollution, global warming, and climate change. The development strategies must therefore be shaped by the following components: The satisfaction of basic human requirements The eradication of poverty Self-reliant and participatory development Environmental consciousness Technology has to play a critical role in the process of changing industrial society. But innovation has to be embedded in social and organizational innovation. This book provides a wide range of research articles in the area of science and technology, sustainability, natural resource management, ecology and its environmental fields, geosciences and geology, atmospheric sciences, sustainability, climate change, and extreme weather, global warming, and environmental change, the effect of climate change on the ecosystem, environment, and pollution.

Neutrosophic Sets and Systems, Vol. 47, 2021 - Florentin Smarandache 2021-12-30

Papers on neutrosophic statistics, neutrosophic probability, plithogenic set, paradoxism, neutrosophic set, NeutroAlgebra, etc. and their applications.

Sustainable Waste Management: Policies and Case Studies - Sadhan Kumar Ghosh 2019-06-21

The book presents high-quality research papers from the Seventh International Conference on Solid Waste Management (IconSWM 2017), held at Professor Jayashankar Telangana State Agricultural University, Hyderabad on December 15–17, 2017. The conference, an official side event of the high-level Intergovernmental Eighth Regional 3R Forum in Asia and the Pacific, aimed to generate scientific inputs into the policy consultation of the Forum co-organized by the UNCRD/UNDESA, MoEFCC India, MOUD India and MOEJ, Japan. Presenting research on solid waste management from more than 30 countries, the book is divided into three volumes and addresses various issues related to innovation and implementation in sustainable waste management, segregation, collection, transportation of waste, treatment technology, policy and strategies, energy recovery, life cycle analysis, climate change, research and business opportunities.

New Trends in Computational Vision and Bio-inspired Computing - S. Smys 2020-09-27

This volume gathers selected, peer-reviewed original contributions presented at the International Conference on Computational Vision and Bio-inspired Computing (ICCVBIC) conference which was held in Coimbatore, India, on November 29-30, 2018. The works included here offer a rich and diverse sampling of recent developments in the fields of Computational Vision, Fuzzy, Image Processing and Bio-inspired Computing. The topics covered include computer vision; cryptography and digital privacy; machine learning and artificial neural networks; genetic algorithms and computational intelligence; the Internet of Things; and biometric systems, to name but a few. The applications discussed range from security, healthcare and epidemic control to urban computing, agriculture and robotics. In this book, researchers, graduate students and professionals will find innovative solutions to real-world problems in industry and society as a whole, together with inspirations for further research.

Soft Computing in Materials Development and its Sustainability in the Manufacturing Sector - Amar Patnaik 2022-08-19

This book focuses on the application of soft computing in materials and manufacturing sectors with the objective to offer an intelligent approach to improve the manufacturing process, material selection and characterization techniques for developing advanced new materials. It unveils different models and soft

computing techniques applicable in the field of advanced materials and solves the problems to help the industry and scientists to develop sustainable materials for all purposes. The book focuses on the overall well-being of the environment for better sustenance and livelihood. Firstly, the authors discuss the implementation of soft computing in the various areas of engineering materials. They also review the latest intelligent technologies and algorithms related to the state-of-the-art methodologies of monitoring and effective implementation of sustainable engineering practices. Finally the authors examine the future generation of sustainable and intelligent monitoring techniques beneficial for manufacturing, and cover novel soft computing techniques for the purpose of effective manufacturing processes at par with the standards laid down by the International Standards of Organization (ISO). This book is intended for academics and researchers from all the fields of engineering interested in joining interdisciplinary initiatives on soft computing techniques for advanced materials and manufacturing.

Adsorption Technique for Removed of Heavy Metal Ions - Dr. Anil Rameshwar Somwanshi 2022-10-18

Water is generally obtained from two principal natural sources: surface water such as fresh water lakes, rivers, streams and groundwater such as borehole water. Water is one of the essentials that support all forms of plant and animal life and it has unique chemical properties due to its polarity and hydrogen bond which means it is able to dissolve, absorb, adsorb or suspend many different compounds. Groundwater is the major source of drinking water in the world because of its availability and constant quality [1-3]. Groundwater is also the preferred source of drinking water in rural areas, particularly in developing countries, because no treatment is often required and the water source is often located near consumers. However, in nature, water is not pure as it acquires contaminants from its surroundings and those arising from humans and animals as well as other biological activities

Applied Water Science, Volume 1 - Inamuddin 2021-06-22

Water is one of the most precious and basic needs of life for all living beings, and a precious national asset. Without it, the existence of life cannot be imagined. Availability of pure water is decreasing day by day, and water scarcity has become a major problem that is faced by our society for the past few years. Hence, it is essential to find and disseminate the key solutions for water quality and scarcity issues. The inaccessibility and poor water quality continue to pose a major threat to human health worldwide. Around billions of people lacking to access drinkable water. The water contains the pathogenic impurities; which are responsible for water-borne diseases. The concept of water quality mainly depends on the chemical, physical, biological, and radiological measurement standards to evaluate the water quality and determine the concentration of all components, then compare the results of this concentration with the purpose for which this water is used. Therefore, awareness and a firm grounding in water science are the primary needs of readers, professionals, and researchers working in this research area. This book explores the basic concepts and applications of water science. It provides an in-depth look at water pollutants' classification, water recycling, qualitative and quantitative analysis, and efficient wastewater treatment methodologies. It also provides occurrence, human health risk assessment, strategies for removal of radionuclides and pharmaceuticals in aquatic systems. The book chapters are written by leading researchers throughout the world. This book is an invaluable guide to students, professors, scientists and R&D industrial specialists working in the field of environmental science, geoscience, water science, physics and chemistry.

Vanillin- Aminoquinoline Schiff Bases and their Co(II), Ni(II) and Cu(II) Complexes - Dr. S. N. Battin

Biodiesel Technology and Applications - Inamuddin 2021-07-21

BIODIESEL This outstanding new volume provides a comprehensive overview on biodiesel technologies, covering a broad range of topics and practical applications, edited by one of the most well-respected and prolific engineers in the world and his team. Energy technologies have attracted great attention due to the fast development of sustainable energy. Biodiesel technologies have been identified as the sustainable route through which overdependence on fossil fuels can be reduced. Biodiesel has played a key role in handling the growing challenge of a global climate change policy. Biodiesel is defined as the monoalkyl esters of vegetable oils or animal fats. Biodiesel is a cost-effective, renewable, and sustainable fuel that can be made from vegetable oils and animal fats. Compared to petroleum-based diesel, biodiesel would offer a non-toxicity, biodegradability, improved air quality and positive impact on the environment, energy security,

safe-to-handle, store and transport and so on. Biodiesels have been used as a replacement of petroleum diesel in transport vehicles, heavy-duty trucks, locomotives, heat oils, hydrogen production, electricity generators, agriculture, mining, construction, and forestry equipment. This book describes a comprehensive overview, covering a broad range of topics on biodiesel technologies and allied applications. Chapters cover history, properties, resources, fabrication methods, parameters, formulations, reactors, catalysis, transformations, analysis, in situ spectroscopies, key issues and applications of biodiesel technology. It also includes biodiesel methods, extraction strategies, biowaste utilization, oleochemical resources, non-edible feedstocks, heterogeneous catalysts, patents, and case-studies. Progress, challenges, future directions, and state-of-the-art biodiesel commercial technologies are discussed in detail. This book is an invaluable resource guide for professionals, faculty, students, chemical engineers, biotechnologists, and environmentalists in these research and development areas. This outstanding new volume: Summarizes the recent developments in this rapidly-developing, multi-disciplinary field Provides the reader with a practical understanding of biodiesel technology toward the real-world applications Formulates concepts, case-studies, patents, and applications helpful in decision making and problem-solving, in a single resource Delivers state-of-the-art information on biodiesel technology Audience: Chemical and process engineers and other professionals, faculty, students, scientists, biotechnologists, and environmental engineers

Fractional Order Control and Synchronization of Chaotic Systems - Ahmad Taher Azar 2017-02-27

The book reports on the latest advances in and applications of fractional order control and synchronization of chaotic systems, explaining the concepts involved in a clear, matter-of-fact style. It consists of 30 original contributions written by eminent scientists and active researchers in the field that address theories, methods and applications in a number of research areas related to fractional order control and synchronization of chaotic systems, such as: fractional chaotic systems, hyperchaotic systems, complex systems, fractional order discrete chaotic systems, chaos control, chaos synchronization, jerk circuits, fractional chaotic systems with hidden attractors, neural network, fuzzy logic controllers, behavioral modeling, robust and adaptive control, sliding mode control, different types of synchronization, circuit realization of chaotic systems, etc. In addition to providing readers extensive information on chaos fundamentals, fractional calculus, fractional differential equations, fractional control and stability, the book also discusses key applications of fractional order chaotic systems, as well as multidisciplinary solutions developed via control modeling. As such, it offers the perfect reference guide for graduate students, researchers and practitioners in the areas of fractional order control systems and fractional order chaotic systems.

Sustainability Concept In Developing Countries - Surendra N. Kulshreshtha 2020-05-27

Sustainability Concept in Developing Countries is a collection of seven studies addressing the issue of sustainability from the perspective of developing countries. Although it is not a comprehensive review of all developing countries, these contributions do portray some of the major issues in achieving sustainability in many developing countries. The book is divided into two parts: Part 1 includes chapters related to concepts and methodology relevant to sustainability in the context of developing countries. Part 2 presents some actual case studies including descriptions of the situations and advice on how to address sustainability in such economies. This book is a useful reference for professionals in developing countries as well as other jurisdictions.

Solid Waste Engineering and Management - Lawrence K. Wang 2022-06-24

This book is the third volume in a three-volume set on Solid Waste Engineering and Management. It focuses on tourism industry waste, rubber tire recycling, electrical and electronic wastes, health-care waste, landfill leachate, bioreactor landfill, energy recovery, innovative composting, biodrying, and health and safety considerations pertaining to solid waste management.. The volumes comprehensively discuss various contemporary issues associated with solid waste pollution management, impacts on the environmental and vulnerable human populations, and solutions to these problems.

Mangroves of Indian Sundarban: Ecological, Biochemical and Molecular Aspects - Dr. Surya Shekhar Das 2021-08-03

Mangrove Ecosystem: An Overview Mangroves: Definition and Types 'Mangrove' has been variously defined in literature. The Oxford dictionary mentioned the words 'mangrove' since 1613, indicating tropical trees or

shrubs found in coastal swamps with tangled roots that grow above the ground. Later, the term 'mangrove' was referred to the individual plant or tidal forest or both, as 'Mangrove plants' and 'Mangrove ecosystem' (MacNae 1968). Chapman (1984) used the term 'mangrove' for inter tidal plants, and considered plant communities of inter tidal forest as mangrove ecosystem called 'mangal'. The term 'mangal' was also commonly used in French and in Portuguese to refer to both forest communities and to individual plants. Several workers have opined that plants growing in between the highest and the lowest tidal limits may be considered 'mangrove' (Aubreville, 1964; MacNae, 1968; Blasco, 1977; Tomlinson, 1986; Naskar & Guha Bakshi, 1987). The tidal limits of various habitats, however, can vary. Mangrove plants comprise a heterogeneous group of independently derived lineages that are defined ecologically by their occurrence in tidal zones along shorelines and in estuaries and physiologically by their ability to withstand high salt concentrations and low soil aeration. Based on their abundance, distribution, and habitat specificity, Tomlinson (1986) distinguished major and minor mangrove elements as well as mangrove associates. He recommended that mangrove species were basically of two types, viz., (1) Major element of mangals or true mangroves - with complete fidelity to the mangrove environment, and (2) Minor element of mangals - not conspicuous in mangrove habitats, rather might prefer the peripheral habitats of mangrove regions. The term 'Mangrove associate' was coined for the flora representing nonarborescent, herbaceous, sub-woody and climber species, found growing mostly in regions bordering the tidal periphery of mangrove habitats. Tomlinson (1986) used fairly rigid criteria to distinguish true mangroves from mangrove associates. In his criteria, true mangroves possess all or most of the following features: (i) occurring only in mangrove environment and not extending into terrestrial communities; (ii) morphological specialization (aerial roots, vivipary); (iii) physiological mechanism for salt exclusion and/or salt excretion; (iv) taxonomic isolation from terrestrial relatives.

Technologies of Mechanical Engineering Industry - Shishir Kumar Sahu 2013-09-03

Collection of selected, peer reviewed papers from the 2013 2nd International Conference on Advances in Mechanics Engineering (ICAME 2013), July 13-14, 2013, Jakarta, Indonesia. The 130 papers are grouped as follows: Chapter 1: Advanced Materials Engineering and Technologies; Chapter 2: General Mechanical Engineering; Chapter 3: Mechanical Design Technology and Modern Design Technologies; Chapter 4: Heat Engineering and Emission Control in Automotive Industry; Chapter 5: Electrical Engineering and Electric Machines; Chapter 6: Power System and Energy Engineering; Chapter 7: Electronics and Integrated Circuits, Embedded Technology and Applications; Chapter 8: Manufacturing and Industrial Engineering, Management Applications; Chapter 9: Modern Control and Automation; Chapter 10: Monitoring, Detection, Measurement Technologies; Chapter 11: Communication Systems and Engineering; Chapter 12: Signal Processing and Data Mining; Chapter 13: Information Technologies and Networks.

Advanced Materials and Processing Technologies - Jun Ding 2019-07-12

2nd International Conference on Sensors, Materials and Manufacturing (ICSMM 2018); International Conference on Materials Sciences and Nanomaterials (ICMSN 2018) and 2nd International Conference on Materials and Intelligent Manufacturing (ICMIM 2018)

IAIC Transactions on Sustainable Digital Innovation (ITSDI) The 3rd Edition Vol. 2 No. 1 October 2020 -

IAIC Transactions on Sustainable Digital Innovation (ITSDI) 2021-05-31

ITSDI (IAIC Transactions on Sustainable Digital Innovation) is a scientific journal organized by Pandawan & Aptikom Publisher and supported by IAIC (Indonesian Association on Informatics and Computing). ITSDI is published twice a year, every April and October

HYDROLOGY AND WATERSHED MANAGEMENT - K. Ramamohan Reddy 2014-10-20

The Proceeding contains the following sections: i) Groundwater Exploration and Exploitation; (ii) RS&GIS Applications in Water Resources; (iii) Watershed Management: Hydrological, Socio-Economic and Cultural Models; (iv) Water and Wastewater Treatment Technologies; (v) Rainwater Harvesting and Rural and Urban Water Supplies; (vi) Floods, Reservoir Sedimentation and Seawater Intrusion; (vii) Water Quality, Pollution and Environment; (viii) Irrigation Management; (ix) Water Logging and Water Productivity in Agriculture; (x) Groundwater Quality; (xi) Hydrologic Parameter Estimation and Modelling; (xii) Climate Change, Water, Food and Environmental Security; (xiii) Groundwater Recharge and Modelling; (xiv) Computational Methods in Hydrology; (xv) Soil and Water Conservation Technologies.

Advances in Physicochemical Properties of Biopolymers (Part 2) - Martin Masuelli 2017-08-08

There is considerable diversity in polymers extracted from natural sources and much work has been done to classify them according to their physical and chemical properties. In the second part of this book set, readers will find general information about the physicochemical properties of several naturally occurring polysaccharides followed by a section dedicated to their application in different fields of research and medicine. Key topics in this part include: • chitosan (properties modifications and applications) • microbial biopolymers • biopolymers present in Brazilian seeds • protein-plastic foams • biopolymer microencapsulation in the food industry • biomedical gels • collagen biomaterials • biopolymer electrospinning This reference is intended for students of applied chemistry and biochemistry who require information about the properties and applications of polysaccharides (such as chitosan) and other protein-based biopolymers.

MSCEIS 2019 - Lala Septem Riza 2020-07-30

The 7th Mathematics, Science, and Computer Science Education International Seminar (MSCEIS) was held by the Faculty of Mathematics and Natural Science Education, Universitas Pendidikan Indonesia (UPI) and the collaboration with 12 University associated in Asosiasi MIPA LPTK Indonesia (AMLI) consisting of Universitas Negeri Semarang (UNNES), Universitas Pendidikan Indonesia (UPI), Universitas Negeri Yogyakarta (UNY), Universitas Negeri Malang (UM), Universitas Negeri Jakarta (UNJ), Universitas Negeri Medan (UNIMED), Universitas Negeri Padang (UNP), Universitas Negeri Manado (UNIMA), Universitas Negeri Makassar (UNM), Universitas Pendidikan Ganesha (UNDHAKSA), Universitas Negeri Gorontalo (UNG), and Universitas Negeri Surabaya (UNESA). In this year, MSCEIS 2019 takes the following theme: "Mathematics, Science, and Computer Science Education for Addressing Challenges and Implementations of Revolution-Industry 4.0" held on October 12, 2019 in Bandung, West Java, Indonesia.

Advances in Memristors, Memristive Devices and Systems - Sundarapandian Vaidyanathan 2017-02-15

This book reports on the latest advances in and applications of memristors, memristive devices and systems. It gathers 20 contributed chapters by subject experts, including pioneers in the field such as Leon Chua (UC Berkeley, USA) and R.S. Williams (HP Labs, USA), who are specialized in the various topics addressed in this book, and covers broad areas of memristors and memristive devices such as: memristor emulators, oscillators, chaotic and hyperchaotic memristive systems, control of memristive systems, memristor-based min-max circuits, canonic memristors, memristive-based neuromorphic applications, implementation of memristor-based chaotic oscillators, inverse memristors, linear memristor devices, delayed memristive systems, flux-controlled memristive emulators, etc. Throughout the book, special emphasis is given to papers offering practical solutions and design, modeling, and implementation insights to address current research problems in memristors, memristive devices and systems. As such, it offers a valuable reference book on memristors and memristive devices for graduate students and researchers with a basic knowledge of electrical and control systems engineering.

Detour Interior and Boundary vertices of BSVN Neutrosophic Graphs - T. Siva Nageswara Rao

In the present article, we deduce a characterization of BSVN detour interior and boundary vertices. We established the relations between BSVN cut node and BSVN detour boundary nodes. Further, we studied properties of BSVN boundary nodes and BSVN interior nodes. Application of detour boundary node, detour interior is given on modeling wireless sensor network in terms of BSVN graphs.

ECRM 2021 20th European Conference on Research Methods in Business and Management - Dr Manuel Au-Yong-Oliveira 2021-06-07

Conference Proceedings of 20th European Conference on Research Methods in Business and Management

ASSESSMENT OF WATER QUALITY USING DATA MINING TECHNIQUES - Dr. Kamakshaiah Kolli

Environmental Nanotechnology - M. H. Fulekar 2017-10-30

Environmental nanotechnology is considered to play a key role in shaping of current environmental engineering and science practices. This book titled "Environmental Nanotechnology" covers the advanced materials, devices, and system development for use in the environmental protection. The development of nano-based materials, understanding their chemistry and characterization using techniques like X-Ray diffraction, FT-IR, EDX, scanning electron microscope (SEM), transmission electron microscope (TEM),

high resolution-TEM, etc is included. It also highlights the scope for their applications in environmental protection, environmental remediation and environmental biosensors for detection, monitoring and assessment. Key Features: Covers basic to advanced Nano-based materials, their synthesis, development, characterization and applications and all the updated information related to environmental nanotechnology. Discusses implications of nanomaterials on the environment and applications of nanotechnology to protect the environment. Illustrates specific topics such as ethics of nanotechnology development, Nano-biotechnology, and application in wastewater technology. Includes applications of nanomaterials for combating global climate change and carbon sequestration. Gives examples of field applications of environmental nanotechnology. This book covers advanced materials, devices, and system developments for use in environmental protection. The development of nano-based materials, understanding its chemistry and characterization by the use of X-Ray diffraction, FT-IR, EDX, scanning electron microscope (SEM), transmission electron microscope (TEM), and high resolution-TEM give the scope for their application in environmental protection, environmental remediation, and environmental biosensors for detection, monitoring, and assessment. The green chemistry based on nano-based materials prevents pollution and controls environmental contaminants.

Recent Advancements in Geotechnical Engineering - B. Soundara 2021-10-15

Geotechnical engineering has become an important discipline of civil engineering due to its rapid advancements and environmental challenges. Special emphasis is placed on innovative materials in the fields of geotechnical engineering, pavement engineering, health monitoring of structures and sustainability. Keywords: Green Building Materials, Cement Based Materials, Concrete Applications, Photocatalytic Effect on Paver Blocks, Stabilization of Black Cotton Soil, Concrete Filled Steel Tube Columns, Cenosphere, Fly Ash Brick, Stone Columns, Reinforced Concrete Beams, Interlocking Masonry Units, Lightweight Filler Materials, Soil Stabilization Using Fibres, Friction Stir Welding of Aluminum and Magnesium.

Nano Engineering and Materials Technologies IV - Hao Gong 2020-05-08

This issue includes selected papers from the 8th International Conference on Nanostructures, Nanomaterials and Nanoengineering 2019 (ICNNN 2019) and from 2019 International Conference on Materials Technology and Applications (ICMTA 2019), Kyoto, Japan, 11th-14th Oct, 2019 and reflects research results of materials for the biomedical application, polymers and composites, structural materials (alloys, steel and building materials), functional and special materials, carbon nanotube and graphene, nanomaterials, chemical technologies for the various applications.

Intelligent Nanomaterials - Ashutosh Tiwari 2016-10-11

Overall, this book presents a detailed and comprehensive overview of the state-of-the-art development of different nanoscale intelligent materials for advanced applications. Apart from fundamental aspects of fabrication and characterization of nanomaterials, it also covers key advanced principles involved in utilization of functionalities of these nanomaterials in appropriate forms. It is very important to develop and understand the cutting-edge principles of how to utilize nanoscale intelligent features in the desired fashion. These unique nanoscopic properties can either be accessed when the nanomaterials are prepared in the appropriate form, e.g., composites, or in integrated nanodevice form for direct use as electronic sensing devices. In both cases, the nanostructure has to be appropriately prepared, carefully handled, and properly integrated into the desired application in order to efficiently access its intelligent features. These aspects are reviewed in detail in three themed sections with relevant chapters: Nanomaterials, Fabrication and Biomedical Applications; Nanomaterials for Energy, Electronics, and Biosensing; Smart Nanocomposites, Fabrication, and Applications.

Reactive and Functional Polymers Volume One - Tomy J. Gutiérrez 2020-08-25

Reactive and functional polymers are manufactured with the aim of improving the performance of unmodified polymers or providing functionality for different applications. These polymers are created mainly through chemical reactions, but there are other important modifications that can be carried out by physical alterations in order to obtain reactive and functional polymers. This volume presents a comprehensive analysis of these reactive and functional polymers. Reactive and Functional Polymers Volume One provides the principles and foundations for the design, development, manufacture and

processing of reactive and functional polymers based primarily on biopolymers, polyesters and polyurethanes. The text provides an in-depth review of updated sources on reactive resins and silicones. In this book, world-renowned researchers have participated, including Dr. Runcang Sun (Associate editor for the journal 'Carbohydrate Polymers'). With its comprehensive scope and up-to-date coverage of issues and trends in Reactive and Functional Polymers, this is an outstanding book for students, professors, researchers and industrialists working in the field of polymers and plastic materials.

Power System Protection in Smart Grid Environment - Ramesh Bansal 2019-01-15

With distributed generation interconnection power flow becoming bidirectional, culminating in network problems, smart grids aid in electricity generation, transmission, substations, distribution and consumption to achieve a system that is clean, safe (protected), secure, reliable, efficient, and sustainable. This book illustrates fault analysis, fuses, circuit breakers, instrument transformers, relay technology, transmission lines protection setting using DIGsILENT Power Factory. Intended audience is senior undergraduate and graduate students, and researchers in power systems, transmission and distribution, protection system broadly under electrical engineering.

Handbook of Green Concept - Ms. Kity Maurya and Dr. Aneeta Sen

This book mainly focuses on Green concept i.e., Green Chemistry, Green Economy, Green Finance and various environmental issues. This book makes the Green concept crystal clear in different disciplines. It is beneficial for individuals of Science, Commerce as well as Arts streams. Thus, it is a web of various fields coming together, woven in a better way to understand the Environment and the requirement of understanding its different corners. The green concept is not very new concept but still its difficult to understand in regarding to its various fields. This Handbook is written in language which could be easily understood which makes the targeted concept clear in a better way. Various diagrams, tables and examples have been included which makes the book more attractive for the readers.

Handbook of Pyrrolidone and Caprolactam Based Materials, 6 Volume Set - Osama M. Musa
2021-07-06

HANDBOOK OF PYRROLIDONE AND CAPROLACTAM BASED MATERIALS Brings together, for the first time, a comprehensive review of all aspects of pyrrolidone- and caprolactam-based materials This comprehensive, six-volume set describes the broad technical universe of γ - and ϵ - lactams, reviewing in-

depth the chemistry of the small lactam-based molecules, uncovering their unique properties and showing how they have enabled a myriad of commercially important applications. From synthesis, through production and into applications, this extensive work targets significant and recent trends in γ - and ϵ - lactam science and technology and addresses all key aspects of pyrrolidone- and caprolactam-based materials to produce a definitive overview of the field. Handbook of Pyrrolidone and Caprolactam Based Materials provides a detailed and modern portrait of the impact of pyrrolidone- and caprolactam-based materials on the world, as well as potential future possibilities. Volume One presents the chemistry of small lactam-based molecules and uncovers their unique properties. Volume Two covers polymeric materials, including polyvinyl pyrrolidone and polyvinyl caprolactam, and reviews homopolymerization, copolymerization, controlled radical polymerization and acrylate based pyrrolidone polymerizations. Volume Three examines the physical chemistry and molecular interactions of pyrrolidone and caprolactam based materials. Volume Four expands upon the characterization theme from the third volume, and includes detailed discussions of nuclear magnetic resonance (NMR) and Fourier transform-infrared (FT-IR) spectroscopy, thermal and mechanical properties, and imaging techniques. Volume Five explores pharmaceutical applications in both ingredients and materials, as well as the antimicrobial properties and applications of pyrrolidone and caprolactam-based materials, and their toxicology. Volume Six covers personal and home care, skin care, transdermal applications and wound care, oral care, adhesion related applications and digital applications such as inkjet technology. Handbook of Pyrrolidone and Caprolactam Based Materials will appeal to industrial scientists and engineers interested in polymer development and manufacturing. It will also benefit academic researchers working in the fields of chemistry, materials science, and chemical and process engineering.

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The special focus of these proceedings is on the areas of infrastructure engineering and sustainability management. They provide detailed information on innovative research developments in construction materials and structures, in addition to a compilation of interdisciplinary findings combining nano-materials and engineering. The coverage of cutting-edge infrastructure and sustainability issues in engineering includes earthquakes, bioremediation, synergistic management, timber engineering, flood management and intelligent transport systems.