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Nitrogen in Agricultural Systems - James Stuart Schepers 2008
Review of the principles and management implications related to nitrogen in the soil-plant-water system.

Humic Substances in Terrestrial Ecosystems - A. Piccolo 1996-06-07
This book highlights the increasing importance of humic substances in the different scientific fields related to terrestrial ecology, soil quality conservation, and environmental chemistry. It shows that modern humic substances research is not only directed to unravel their yet ill-defined chemical structure but is successfully exploring the interconnected chemical, biological, and physical processes that maintain the ecological equilibrium of soil and ensure a sustainable agricultural production. The book will primarily be of interest to soil scientists and to ecological and environmental scientists. People in the fields of forest science, agronomy, analytical and environmental chemistry, water science, environmental engineering, and coal science will also find this publication worthy of their attention.

Environmental Impacts of Soil Component Interactions - P. M. Huang 1995-03-29
This book addresses the interactions of soil minerals with organics and microbes and their impacts on the dynamics, transformations, and toxicity of metals, metalloids, other inorganics, and xenobiotics that affect land quality and ecosystem health. It is the result of the work group on "interactions of soil minerals with organic components and microorganisms" in the International Society of Soil Science.

Flavonoids and Their Disease Prevention and Treatment Potential - H.P. Vasantha Rupasinghe 2021-03-29
Flavonoids are ubiquitously present in plant-based foods and natural health products. The molecule of flavonoids is characterized by a 15-carbon skeleton of C6–C3–C6, with the different structural configuration of subclasses. The major subclasses of flavonoids with health-promotional properties are the flavanols or catechins (e.g., epigallocatechin 3-gallate from green tea), the flavones (e.g., apigenin from celery), the flavonols (e.g., quercetin glycosides from apples, berries, and onion), the flavanones (e.g., naringenin from citrus), the anthocyanins (e.g., cyanidin-3-O-glucoside from berries), and the isoflavones (e.g., genistein from soya beans). Scientific evidence has strongly shown that regular intake of dietary flavonoids in efficacious amounts reduces the risk of oxidative stress- and chronic inflammation-mediated pathogenesis of human diseases such as cardiovascular disease, certain cancers, and neurological disorders. The physiological benefits of dietary flavonoids have been demonstrated to be due to multiple mechanisms of action, including regulating redox homeostasis,

epigenetic regulations, activation of survival genes and signaling pathways, regulation of mitochondrial function and bioenergetics, and modulation of inflammation response. The role of flavonoids on gut microbiota and the impact of microbial metabolites of flavonoids on optimal health has begun to unravel. The complex physiological modulations of flavonoid molecules are due to their structural diversity. However, some flavonoids are not absorbed well, and their bioavailability could be enhanced through structural modifications and applications of nanotechnology, such as encapsulation. This Special Issue consists of four review articles on flavonoids and 15 original research articles, which cover the latest findings on the role of dietary flavonoids and their derivatives in disease prevention and treatment.

Geoecology of Antarctic Ice-Free Coastal Landscapes - L. Beyer 2012-12-06

Research in Antarctica in the past two decades has fundamentally changed our perceptions of the southern continent. This volume describes typical terrestrial environments of the maritime and continental Antarctic. Life and chemical processes are restricted to small ranges of ambient temperature, availability of water and nutrients. This is reflected not only in life processes, but also in those of weathering and pedogenesis. The volume focuses on interactions between plants, animals and soils. It includes aspects of climate change, soil development and biology, as well as above- and below-ground results of interdisciplinary research projects combining data from botany, zoology, microbiology, pedology, and soil ecology.

The Alkaloids - Hans-Joachim Knolker 2022-03-16

The Alkaloids, Volume 88, the newest release in a series that has covered the topic for more than 60 years, discusses key aspects of alkaloid chemistry, biology and pharmacology. Sections in this release include chapters on the Biology of quinoline and quinazoline alkaloids, Synthesis of pyrimidine-containing alkaloids, and much more. Provides the latest information on the study of alkaloids Covers alkaloid chemistry, biology, pharmacology and medical applications Contains more than 80 published volumes in this interesting field of study

Selected Water Resources Abstracts - 1991

Microbes at Work - Heribert Insam 2009-12-07

Among the goals of environmentally sound waste treatment is the recycling of organic wastes. The most practiced options are composting and anaerobic digestion, both processes being carried out by microorganisms. This book provides an overview of the various ways microbes are doing their job and gives the reader an impression of their potential. The sixteen chapters of this book summarize the advantages and disadvantages of treatment processes, whether they are aerobic like composting or work without oxygen like anaerobic digestion for biogas (methane) production. These chapters show the potential of microorganisms to create valuable resources from otherwise wasted materials. These resources include profitable organic, humus-like soil conditioners or fertilizer components which are often suppressive to plant diseases. Composts may thus improve soil carbon sequestration, or support sustainable agriculture by reducing the need for mineral fertilizers or pesticides. If anaerobic digestion is used, the biogas produced may replace fossil fuels. Thus, proper biological waste treatment with the help of microorganisms should contribute to a reduction of anthropogenic greenhouse gas production.

Labile Organic Matter - Zhongqi He 2020-01-22

"Because of its dynamic nature, labile organic matter is a key player in terrestrial and aquatic ecosystems. Editors Zhongqi He and Fengchang Wu include contributions from more than 30 senior researchers and innovative junior investigators from six countries. With issue-oriented comprehensive reviews and problem-solving case studies, this collection brings together soil and aquatic scientists to provide a comprehensive understanding for managing the sources and fates of labile organic matter. A timely synthesis of recent research, this collection illustrates the remarkable range of advanced techniques and approaches for labile organic matter research. This book will serve as a valuable reference for university faculty, graduate students, soil scientists, ecologists, limnologists, marine scientists, environmental scientists, agricultural

engineers, and any who work with various aspects of labile organic matter in the environment."

Intestinal Microorganisms of Termites and Other Invertebrates - Helmut König 2006

This is the first work to focus on microbes in gut systems of soil animals. Beginning with an overview of the biology of soil invertebrates, the text turns to the gut microbiota of termites, which are important soil processors in tropical and subtropical regions. Coverage extends to intestinal microbiota of such other litter decomposers as earthworms, springtails, millipedes, and woodlice. Thoroughly illustrated, including color photographs.

Nuclear Magnetic Resonance - G A Webb 2008-05-27

As a spectroscopic method, nuclear magnetic resonance (NMR) has seen spectacular growth over the past two decades, both as a technique and in its applications. Today the applications of NMR span a wide range of scientific disciplines, from physics to biology to medicine. Each volume of Nuclear Magnetic Resonance comprises a combination of annual and biennial reports which together provide comprehensive coverage of the literature on this topic. This Specialist Periodical Report reflects the growing volume of published work involving NMR techniques and applications, in particular NMR of natural macromolecules which is covered in two reports: "NMR of Proteins and Nucleic Acids" and "NMR of Carbohydrates, Lipids and Membranes". For those wanting to become rapidly acquainted with specific areas of NMR, this title provides unrivalled scope of coverage. Seasoned practitioners of NMR will find this an invaluable source of current methods and applications. Volume 37 covers literature published from June 2006 to May 2007.

Microorganisms in Soils: Roles in Genesis and Functions - Francois Buscot 2006-03-30

For this third volume of the series Soil Biology, internationally renowned scientists shed light on the significant roles of microbes in soil. Key topics covered include: bioerosion, humification, mineralization and soil aggregation; Interactions in the mycorrhizosphere; microbes and plant nutrient cycling; Microbes in soil surface or toxic metal polluted soils; Use of marker genes and isotopes in soil microbiology, and many more.

BIOLOGICALLY ACTIVE COPOLYMERS - Dr. P. Pazhanisamy & Dr. S. Bharathi 2021-01-28

1.1 Polymer The history of polymers goes back further than that of any other group of substances known to mankind. From the origin of mankind in the Garden of Eden, dependence was upon naturally-occurring polymers, for food, clothing, shelter and communication. On the contrary, the history of synthetic polymers is relatively short. It was only through the pioneering work of Staudinger and the quantitative studies of Carothers, the macromolecular concept was accepted. Long before this time, synthetic polymers were being produced and natural polymers were being altered chemically. Styrene was first polymerized in 1839 and in the same year the process of vulcanization of rubber was made successful. 1.2 Description and classification The word polymer was first used to describe compounds with the same composition but of different molecular weights. Berzelius defined polymer as ‘many of a unit’. Carothers defined polymerization as a reaction that is functionally capable of proceeding indefinitely. According to IUPAC, a monomer is defined as ‘a compound, consisting of molecules each of which can provide one or more constitutional units of a polymer or oligomer’ and a monomeric unit or “mer” is the ‘largest constitutional unit contributed by a single monomer molecule in a polymerization processes.

Thiazoles—Advances in Research and Application: 2012 Edition - 2012-12-26

Thiazoles—Advances in Research and Application: 2012 Edition is a ScholarlyEditions™ eBook that delivers timely, authoritative, and comprehensive information about Thiazoles. The editors have built Thiazoles—Advances in Research and Application: 2012 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Thiazoles in this eBook to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Thiazoles—Advances in Research and Application: 2012 Edition has been produced by the world’s leading scientists, engineers, analysts, research institutions, and companies. All

of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at http://www.ScholarlyEditions.com/.

Bioactive Molecules from Marine Microorganisms - Hanna Mazur-Marzec 2021-03-30

For this Special Issue book, ten papers focusing on novel bioactive molecules from different marine microorganisms, including fungi, cyanobacteria, actinobacteria and diatoms, were selected. The isolated biomolecules represent different structures and showed anticancer, antiviral, antifungal, antibacterial, anti-inflammatory and enzyme-inhibiting activities. One of the papers is a review article on microviridins, a class of bioactive cyanobacterial peptides.

Nutraceuticals in Veterinary Medicine - Ramesh C. Gupta 2019-05-21

This unique work compiles the latest knowledge around veterinary nutraceuticals, commonly referred to as dietary supplements, from ingredients to final products in a single source. More than sixty chapters organized in seven sections collate all related aspects of nutraceutical research in animal health and disease, among them many novel topics: common nutraceutical ingredients (Section-I), prebiotics, probiotics, synbiotics, enzymes and antibacterial alternatives (Section-II), applications of nutraceuticals in prevention and treatment of various diseases such as arthritis, periodontitis, diabetes, cognitive dysfunctions, mastitis, wounds, immune disorders, and cancer (Section-III), utilization of nutraceuticals in specific animal species (Section-IV), safety and toxicity evaluation of nutraceuticals and functional foods (Section-V), recent trends in nutraceutical research and product development (Section-VI), as well as regulatory aspects for nutraceuticals (Section-VII). The future of nutraceuticals and functional foods in veterinary medicine seems bright, as novel nutraceuticals will emerge and new uses of old agents will be discovered. International contributors to this book cover a variety of specialties in veterinary medicine, pharmacology, pharmacognosy, toxicology, chemistry, medicinal chemistry, biochemistry, physiology, nutrition, drug development, regulatory frameworks, and the nutraceutical industry. This is a highly informative and carefully presented book, providing scientific insight for academia, veterinarians, governmental and regulatory agencies with an interest in animal nutrition, complementary veterinary medicine, nutraceutical product development and research.

Study on Synthesis of 6-phenyl-4-(4-(4-(p-tolyolxy) phenoxy) phenyl)-5, 6-dinydropyridinmin-2(H)-one and their Antimicrobial Activity - Rajarshi Patel 2013-01-31

Research Paper from the year 2013 in the subject Chemistry - Organic Chemistry, , course: DOCTOR OF PHILOSOPHY IN CHEMISTRY, language: English, abstract: 1-chloro-4-(p-tolyolxy)benzene react with 1-(4-hydrogy phenyl)-ethanone in presence of copper metal as a catalyst gives 1-(4-(4(p-tolyolxy) phenoxy)phenyl)ethanone,this derivatives react with various substituted aldehyde to give corresponding substituted chalcone derivatives (N-1).Now these derivatives(N-1).on condensation with used gives 6-phenyl-4(4-(4-(p-tolyolxy) phenoxy) phenyl)-5,6-dinydropyridinmin-2(H)-one (N-2) Structure elucidation of synthesized. Compound has been made on the basis of element analysis, 1H NMR Spectra studies. The microbial activity of the synthesized compounds has been studied against the species bacillus subtillis, staphylococcus aureus, Escherichia coli, and salmonella typhi.

Advances in Soil Organic Matter Research - W S Wilson 1991-01-01

The papers in this volume provide a balanced account of developments in soil organic matter research. It focuses on composition and structure, water quality, organic matter turnover, humus quality and fertility, and is essential reading for all those concerned with the environmental aspects of soil conservation and improvement.

Antimicrobial Resistance As a Global Public Health Problem: How Can We Address It? - Ilana L. B. C. Camargo 2020-12-21

This eBook is a collection of articles from a Frontiers Research Topic. Frontiers Research Topics are very popular trademarks of the Frontiers Journals Series: they are collections of at least ten articles, all centered on a particular subject. With their unique mix of varied contributions

from Original Research to Review Articles, Frontiers Research Topics unify the most influential researchers, the latest key findings and historical advances in a hot research area! Find out more on how to host your own Frontiers Research Topic or contribute to one as an author by contacting the Frontiers Editorial Office: frontiersin.org/about/contact.

What Happens to Nutrient Dynamics When You Get Land Management Right - Prof Paul Ola Igboji Phd 2016-07-01

This book entitled "What Happens To Nutrient Dynamics When You Get Land Management Right: The East Anglia, England Success Story" arose from a study conducted in a temperate ecosystem by an erudite scholar. The work stands listed in other formats and editions at Essex and British Library. Also listed in Google Scholar, PhD Tree amongst other International Indexing. The work is rich in information, data, results and recommendations that cover over 8050 years of English Agriculture and projected beyond 2055. Amongst the areas of expertise covered in chapter one are: agricultural land management in UK, soil biodiversity, C-cycle, C-sequestration, N-cycle and N-fixation; soil health, soil biological properties - whole ecosystem and soil respiration, microbial biomass, enzyme activities. Others are humic matter in soils, influences of environment and agriculture, origins, composition and structure of humic substances, isolation of humic substances from soil, purification and fractionation of extracts; impact on agriculture and the environment. In this section is also introduced the place of modelling in environmental monitoring and prediction, the Century 4.0 model; RothC model; soil C turnover, sequestration and microbial respiration and the aims and hypotheses of the study. In chapter two, the work details the materials and methods; site description namely: Wivenhoe Park; Writtle College; grassland farming at Writtle, woodland and protected areas, soils of college farms, soil analysis; design of study site; weather and climatic information of the study area. Others include: field methods and laboratory protocols; soil physical and chemical properties; in-situ measurement of soil respiratory activity, laboratory measurement of soil respiratory activity, estimation of microbial carbon, soil enzyme activity; cellulose activity; phosphomonoesterase activity; urease activity; quantification and qualification of soil humic acids; extraction and purification of humic acids, examination of humic acid using 13C-NMR spectroscopy; statistical and data analysis. In chapter three the following subjects were covered: diurnal and seasonal variations in field soil respiration; the impact of changes in soil temperature and WFPS and its relationship with field soil respiration; the effect of time and season of sampling on laboratory soil respiration under given temperature and moisture conditions, discussions on diurnal and seasonal variations in field soil respiration, laboratory soil respiration under given temperature and moisture, summary. The chapter four details the effects of land management on whole ecosystem and soil respiration, carbon and nitrogen levels of soil with results on whole ecosystem respiration, soil respiration, soil microbial C, enzyme activity, cellulose activity, urease activity; phosphomonoesterase activity; soil humic acid concentration; humic acid production; humic acid generated using 13C-NMR spectroscopy; soil total C, soil total N, soil C: N ratio, soil pH; changes in soil temperature, WFPS; discussion on whole ecosystem respiration; soil respiration, soil microbial C; soil enzyme activity; humic acid production from soils, humic acid structure obtained with 13C-NMR. Other discussions on soil total C and N; soil pH, soil temperature and WFPS plus summary. The chapter five centers on modelling soil C turnover, sequestration and microbial respiration starting with Century model overall structure; Century key overall processes and assumptions; Century input requirements; weather and management information; the Century environment; Century parametisation and events scheduling for site 1 (arable land under barley); site 2 (grassland under permananent pasture sown with red clover a year before stocking); site 3 (grassland under permanent pasture on 5 year ley before stocking; site 4 (deciduous woodland); statistical and data analysis. The results on the effects of land management on measured and simulated soil total C

Disturbance Effects on Soil Carbon and Greenhouse Gas Emissions in Forest Ecosystems - Scott X. Chang 2020-05-23

Forest ecosystems are often disturbed by agents such as harvesting, fire, wind, insects and diseases, and acid deposition, with differing intensities

and frequencies. Such disturbances can markedly affect the amount, form, and stability of soil organic carbon in, and the emission of greenhouse gases, including CO2, CH4, and N2O from, forest ecosystems. It is vitally important that we improve our understanding of the impact of different disturbance regimes on forest soil carbon dynamics and greenhouse gas emissions to guide our future research, forest management practices, and policy development. This Special Issue provides an important update on the disturbance effects on soil carbon and greenhouse gas emissions in forest ecosystems in different climate regions.

Marine Glycobiology - Se-Kwon Kim 2016-10-14

Marine glycobiology is an emerging and exciting area in the field of science and medicine. Glycobiology, the study of the structure and function of carbohydrates and carbohydrate-containing molecules, is fundamental to all biological systems and represents a developing field of science that has made huge advances in the last half-century. This book revolutionizes the concept of marine glycobiology, focusing on the latest principles and applications of marine glycobiology and their relationships.

Genome Mining and Marine Microbial Natural Products - Kui Hong 2020-01-07

Two review papers, eight research articles, and one brief report were published in this Special Issue. They showed the rich resources that are present within the genomes of marine microorganisms and discussed the use of recently developed tools and technologies to exploit this genetic richness. Examples include the rational supply of precursors according to the relevant biosynthetic pathway and stress driven discovery together with the use of histone deacetylase inhibitors to facilitate the discovery of new bioactive molecules with potential biopharmaceutical applications. We believe that the content of this Special Issue reflects the current state-of-the-art research in this area and highlights the interesting strategies that are being employed to uncover increasing numbers of exciting novel compounds for drug discovery from marine genetic resources.

Handbook of Soil Science - Malcolm E. Sumner 1999-08-31

The Handbook of Soil Science provides a resource rich in data that gives professional soil scientists, agronomists, engineers, ecologists, biologists, naturalists, and their students a handy reference about the discipline of soil science. This handbook serves professionals seeking specific, factual reference information. Each subsection includes a description of concepts and theories; definitions; approaches; methodologies and procedures; tabular data; figures; and extensive references.

Natural Product Experiments in Drug Discovery - Karuppusamy Arunachalam 2022-10-22

This detailed volume explores a wide range of evidence-based complementary medicine and various bio-analytical techniques used to define botanical products. Collecting recent work and current developments in the field of contemporary phytomedicine as well as their future possibilities in human health care, the book includes unique contributions in the form of chapters on phytomedicine and screening biological activities explained with diverse hyphenated techniques, as well as issues related to herbal medications, such as efficacy, adulteration, safety, toxicity, regulations, and drug delivery. Written for the Springer Protocols Handbooks series, chapters feature advice from experts on how to best conduct future experiments. Extensive and practical, Natural Product Experiments in Drug Discovery serves as an ideal reference for students, professors, and researchers in universities, R&D institutes, pharmaceutical and herbal enterprises, and health organizations.

Handbook of Seafood and Seafood Products Analysis - Leo M.L. Nollet 2009-11-24

Seafood and seafood products represent some of the most important foods in almost all types of societies around the world. More intensive production of fish and shellfish to meet high demand has raised some concerns related to the nutritional and sensory qualities of these cultured fish in comparison to their wild-catch counterparts. In addition, t

SOUVENIR of 1st International Science Congress (ISC-2011) -

Prof. Dipak Sharma
The International Science Congress Association (ISCA) organized the 1st International Science Congress (ISC-2011) at Indore, M.P. India with Science and Technology for Sustainable Development as its focal theme. The congress was hosted by Maharaja Ranjit Singh College of Professional Sciences on 24th and 25th December 2011. It was distributed in 20 sections. A total 900 Research Papers and 1300 registrations all over the world were received. Delegates from Malaysia, Egypt, Bangladesh, Nigeria, Indonesia, Iran, South Africa, Iraq, Mexico, Japan, Uganda, Pakistan, Kingdom of Saudi Arabia, Russia, Latvia, Nepal, Lithuanian and from length and breadth of our nation participated in the ISC-2011.

U.S. Geological Survey Water-supply Paper - 1982

Polymeric Materials with Antimicrobial Activity - Alexandra Muñoz-Bonilla 2013-11-13
Antimicrobial polymers are materials that prevent microorganism growth and are needed for many everyday applications from food packaging and water treatment to medicine and healthcare. This new book covers different areas of antimicrobial materials based on polymers including chitosan, polymers with ammonium and phosphonium groups, polymer nanofibers, carbon-based polymer Nanocomposites, polymeric and non-polymeric metal complexes, and biomimetic materials. By combining the information of different materials as well as antimicrobial action modes and applications within one source, the book provides a general summary of the field. Polymeric Materials with Antimicrobial Activity starts with a general introduction to antimicrobial polymers and presents the most common types of microorganisms (bacteria, fungi, yeast and algae) along with the main areas of application of antimicrobial polymeric materials. Specific chapters then detail different polymer systems covering the fundamental issues of synthesis, characterization, physico-chemical properties and applications. With contributions from leading scientists the book is suitable for researchers in polymers, chemistry, biology and materials science interested in an overview of antimicrobial polymeric materials as well as the recent advances in their synthesis, properties and applications.

Biochar as Soil Amendment - José María De la Rosa 2020-03-10
The role of biochar in improving soil fertility is increasingly being recognized and is leading to recommendations of biochar amendment of degraded soils. In addition, biochars offer a sustainable tool for managing organic wastes and to produce added-value products. The benefits of biochar use in agriculture and forestry can span enhanced plant productivity, an increase in soil C stocks, and a reduction of nutrient losses from soil and non-CO2 greenhouse gas emissions. Nevertheless, biochar composition and properties and, therefore, its performance as a soil amendment are highly dependent on the feedstock and pyrolysis conditions. In addition, due to its characteristics, such as high porosity, water retention, and adsorption capacity, there are other applications for biochar that still need to be properly tested. Thus, the 16 original articles contained in this book, which were selected and evaluated for this Special Issue, provide a comprehensive overview of the biological, chemicophysical, biochemical, and environmental aspects of the application of biochar as soil amendment. Specifically, they address the applicability of biochar for nursery growth, its effects on the productivity of various food crops under contrasting conditions, biochar capacity for pesticide retention, assessment of greenhouse gas emissions, and soil carbon dynamics. I would like to thank the contributors, reviewers, and the support of the Agronomy editorial staff, whose professionalism and dedication have made this issue possible.

Marine Microbial-Derived Molecules and Their Potential Medical and Cosmetic Applications - Jinwei Zhang 2021-09-15

Index Medicus - 2003

Sediments, Diagenesis, and Sedimentary Rocks - F.T. Mackenzie 2005-11-22
This volume covers the formation and biogeochemistry of a variety of important sediment types from their initial formation through their

conversion (diagenesis) to sedimentary rocks. The volume deals with the chemical, mineralogical, and isotopic properties of sediments and sedimentary rocks and their use in interpreting the environment of formation and subsequent events in the history of sediments, and the nature of the ocean-atmosphere system through geological time. Reprinted individual volume from the acclaimed Treatise on Geochemistry, (10 Volume Set, ISBN 0-08-043751-6, published in 2003). Comprehensive and authoritative scope and focus Reviews from renowned scientists across a range of subjects, providing both overviews and new data, supplemented by extensive bibliographies Extensive illustrations and examples from the field

Modern Magnetic Resonance - Graham A. Webb 2007-05-26

A comprehensive collection of the applications of Nuclear Magnetic Resonance (NMR), Magnetic Resonance Imaging (MRI) and Electron-Spin Resonance (ESR). Covers the wide ranging disciplines in which these techniques are used: * Chemistry; * Biological Sciences; * Pharmaceutical Sciences; * Medical uses; * Marine Science; * Materials Science; * Food Science. Illustrates many techniques through the applications described, e.g.: * High resolution solid and liquid state NMR; * Low resolution NMR, especially important in food science; * Solution State NMR, especially important in pharmaceutical sciences; * Magnetic Resonance Imaging, especially important for medical uses; * Electron Spin Resonance, especially important for spin-labelling in food, marine and medical studies.

Aldehydes—Advances in Research and Application: 2013 Edition - 2013-06-21

Aldehydes—Advances in Research and Application: 2013 Edition is a ScholarlyEditions™ book that delivers timely, authoritative, and comprehensive information about Acetaldehyde. The editors have built Aldehydes—Advances in Research and Application: 2013 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Acetaldehyde in this book to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Aldehydes—Advances in Research and Application: 2013 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at http://www.ScholarlyEditions.com/.

Advances in Agronomy - Donald L. Sparks 2002-02-07

Advances in Agronomy has the highest impact factor among serial publications in Agriculture. The Science Citation Index, 1986, reports an impact factor over 2,459 and a cited half-life over 10 years. Volume 76 contains five excellent reviews on topics of great interest to crop and soil scientists as well as others in various fields. Chapter 1 is concerned with the potential of tropical soils to sequester carbon. Topics that are covered include soil inorganic and organic pools and dynamics, loss of soil organic pools from tropical soils, and potential for C sequestration in tropical soils. Chapter 2 covers the applications of crop/soil simulation models in tropical agricultural systems. Chapter 3 deals with interorganismal signaling in suboptimum environments with emphasis on legume-rhizobia symbiosis. Chapter 4 discusses the surface chemistry and function of microbial biofilms. The authors discuss biofilm formation and matrix architecture and general features and properties. Chapter 5 deals with vegetable crop scheduling and prediction. Topics that are covered include identification of stages of growth and development and experimental approaches for developing scheduling and prediction models. Advances in Agronomy has the highest impact factor among serial publications in Agriculture. The Science Citation Index, 1986, reports an impact factor over 2,459 and a cited half-life over 10 years. Volume 76 contains five excellent reviews on topics of great interest to crop and soil scientists as well as others in various fields. Chapter 1 is concerned with the potential of tropical soils to sequester carbon. Topics that are covered include soil inorganic and organic pools and dynamics, loss of soil organic pools from tropical soils, and potential for C sequestration in tropical soils. Chapter 2 covers the applications of

crop/soil simulation models in tropical agricultural systems. Chapter 3 deals with interorganismal signaling in suboptimum environments with emphasis on legume-rhizobia symbiosis. Chapter 4 discusses the surface chemistry and function of microbial biofilms. The authors discuss biofilm formation and matrix architecture and general features and properties. Chapter 5 deals with vegetable crop scheduling and prediction. Topics that are covered include identification of stages of growth and development and experimental approaches for developing scheduling and prediction models.

Biochar Application - T. Komang Ralebitso-Senior 2016-05-07

Biochar Application: Essential Soil Microbial Ecology outlines the cutting-edge research on the interactions of complex microbial populations and their functional, structural, and compositional dynamics, as well as the microbial ecology of biochar application to soil, the use of different phyto-chemical analyses, possibilities for future research, and recommendations for climate change policy. Biochar, or charcoal produced from plant matter and applied to soil, has become increasingly recognized as having the potential to address multiple contemporary concerns, such as agricultural productivity and contaminated ecosystem amelioration, primarily by removing carbon dioxide from the atmosphere and improving soil functions. Biochar Application is the first reference to offer a complete assessment of the various impacts of biochar on soil and ecosystems, and includes chapters analyzing all aspects of biochar technology and application to soil, from ecogenomic analyses and application ratios to nutrient cycling and next generation sequencing. Written by a team of international authors with interdisciplinary knowledge of biochar, this reference will provide a platform where collaborating teams can find a common resource to establish outcomes and identify future research needs throughout the world. Includes multiple tables and figures per chapter to aid in analysis and understanding Includes a comprehensive table of the methods used within the contents, ecosystems, contaminants, future research, and application opportunities explored in the book Includes knowledge gaps and directions of future research to stimulate further discussion in the field and in climate change policy Outlines the latest research on the interactions of complex microbial populations and their functional, structural, and compositional dynamics Offers an assessment of the impacts of biochar on soil and ecosystems

SOUVENIR of 4th International Science Congress - Prof. Dipak Sharma

Biogeochemistry - Heinrich D. Holland 2005-06-08

The Treatise on Geochemistry is the first work providing a comprehensive, integrated summary of the present state of geochemistry. It deals with all the major subjects in the field, ranging from the chemistry of the solar system to environmental geochemistry. The Treatise on Geochemistry has drawn on the expertise of outstanding scientists throughout the world, creating the reference work in geochemistry for the next decade. Each volume consists of fifteen to twenty-five chapters written by recognized authorities in their fields, and chosen by the Volume Editors in consultation with the Executive Editors. Particular emphasis has been placed on integrating the subject matter of the individual chapters and volumes. Elsevier also offers the Treatise on Geochemistry in electronic format via the online platform ScienceDirect, the most comprehensive database of academic research on the Internet today, enhanced by a suite of sophisticated linking, searching and retrieval tools.

SOUVENIR of 3rd International Science Congress ISC-2013 - Prof. Dipak Sharma

International Science Congress Association organized 3rd International Science Congress (ISC-2013), with “Innovation with Global Responsibility” as its Focal Theme. ISC-2013 is divided in 20 sections. A total number of 900 Research Papers and 1000 registrations from 36 countries all over the world have been received. They are mainly from India, Iran, Sudan, Iraq, South Africa, Phillipines, Pakistan, Nighana, Erode, Czech Republic, Bangladesh, Swaziland, Jordan, USA, Thailand, Japan, Malaysia, Kazakhstan, UK, Colombia, Nepal, Italy, Bulgariya, Cameroun, France, Greece, Kazakhstan, Korea, Lithuania, Nigeria,

Poland, Romania, Slovakiya, Ukraine, Venezuela and Turkey.