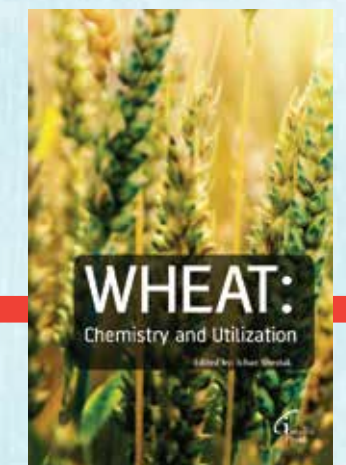
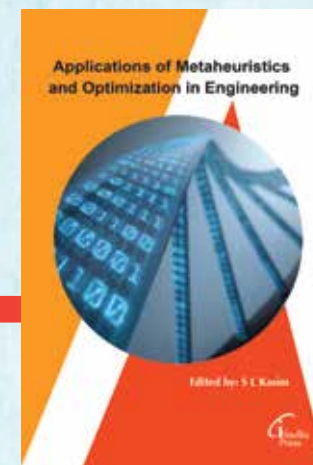


# INTELLIZ PRESS

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NY 10801  
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www.intellizpress.com

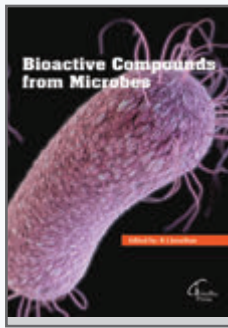
## CATALOG 2019



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### Bioactive Compounds from Microbes

*Editor: R J Jonathan*

Microbial bioactive compounds have received growing attention for their implications in human health. This book covers all aspects of bioactive marine natural products, including antibiotic compounds, polysaccharides, inhibitors, enzymes, peptides, and pigments. These are used in various fields of biology that range from nutraceuticals to cosmeceuticals. Marine bacteria and fungi are of considerable importance as new promising sources of a huge number of biologically active products. This book will be of great interest to students and researchers working in the very active and competitive fields of antibiotic and agrochemical discovery.

Print ISBN: 978-1-68251-469-6 | \$155 | 2019 | Hardcover



### Microbes in Biotechnology and Sustainable Agriculture

*Editor: Joanna Mistryoty*

Microbes are an integral part of biogeochemical cycles which are important for our sustenance. A large number of these microbes are beneficial to plants, animals and humans in one form or the other but some are harmful as well. This book covers the wide-ranging aspects of the role of microbes in sustainable agriculture and biotechnological developments. Understanding how agricultural practices shift microbial abundance, diversity and life strategies, can assist with designing farming systems that can support high yields, while enhancing C sequestration and increasing resilience to climate change.

Print ISBN: 978-1-68251-470-2 | \$155 | 2019 | Hardcover



### The Science of Agriculture: A Biological Approach

*Editor: Pedro C. Araez*

Modern agriculture depends heavily on engineering and technology and on the biological and physical sciences. Irrigation, drainage, conservation, and sanitary engineering are some of the fields requiring the specialized knowledge of agricultural engineers. This book covers key areas in agricultural science, namely crop improvement, production, response to water, nutrients, and temperature, crop protection, agriculture and human health, and animal nutrition. This book is an appealing tool to the existing knowledge and is especially intended for university students and all professionals in the field of agriculture.

Print ISBN: 978-1-68251-471-9 | \$150 | 2019 | Hardcover

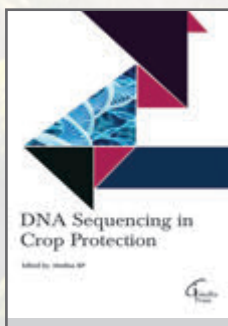


### Future Foods: Fast Forwarding to Future Foods

*Editor: Nataliya K. Smith*

With its wide resources, speed of reproductive growth, lower feed cost, edible insects are an important food source which has immense potential of the development and utilization. This book presents comprehensive information on ranging from mushroom, insect, and earthworm farming to smart packaging and 3D printing of future foods. Edible insects have gained interest in recent years all over the world as a solution to mitigate the lack of protein in a near future. This book also aims to identify potential hazards related to edible insects' production and transformation. Preventive measures to their control will be presented considering pre-requirements in their production and transformation.

Print ISBN: 978-1-68251-472-6 | \$160 | 2019 | Hardcover

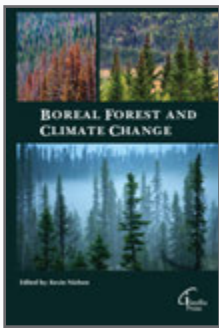


### DNA Sequencing in Crop Protection

*Editor: Medina KP*

This book is intended to serve as an important resource and review to the researchers in the field of DNA sequencing. The book focuses on state of the art methods of DNA sequencing and its application in crop and plants. It will cover the routine applications of DNA-based technology in different aspects of crop protection. This book will also highlight the perspectives of innovative approaches, based on nucleotide sequences, in providing new sustainable and environmentally-friendly strategies for disease and pest management.

Print ISBN: 978-1-68251-473-3 | \$160 | 2019 | Hardcover

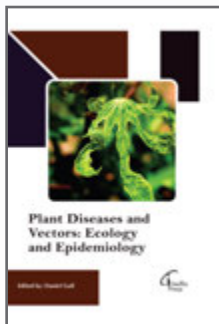


## Boreal Forest and Climate Change

*Editor: Kevin Nielsen*

The boreal forest holds almost one third of the world's vegetation and soil carbon. Climate change could increase fire risk across most of the managed boreal forest. Decreasing this risk by increasing the proportion of broad-leaved tree species is an overlooked mitigation-adaptation strategy with multiple benefits. The book focuses on current understanding of the ecology of boreal forests and describes their unique features in the context of circumpolar and global patterns. This book aims to synthesize knowledge on boreal forest carbon stocks in relation to changes in fire severity.

Print ISBN: 978-1-68251-474-0 | \$160 | 2019 | Hardcover

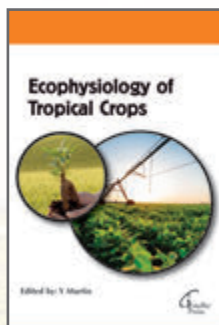


## Plant Diseases and Vectors: Ecology and Epidemiology

*Editor: Daniel Gull*

Portraying all aspects of plant diseases, pathogenesis, integrated plant protection, biology and molecular biology of viruses, bacteria, phytoplasmas, oomycota, fungi and herbivores, including nematodes, mites, insects, snails and rodents, this book is intended to introduce to the wider audience vector-borne diseases, the threats and the risks, but also the panic that can be induced without a real risk.

Print ISBN: 978-1-68251-475-7 | \$150 | 2019 | Hardcover

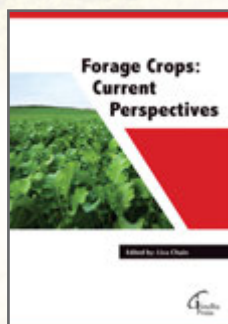


## Ecophysiology of Tropical Crops

*Editor: Y Martin*

This book discusses the fundamental ideas about the numerical description of plant development and considers effects of climatic factors, such as temperature, light, and water on physiological processes in plants. Ecophysiology of major tropical tree crops, considered here on a broader sense and including species such as banana, cashew, cassava, citrus, cocoa, coconut, coffee, mango, papaya, rubber, and tea, are examined. A valuable reference guide for practicing researchers, academics, PhD students and other scientists.

Print ISBN: 978-1-68251-476-4 | \$150 | 2019 | Hardcover

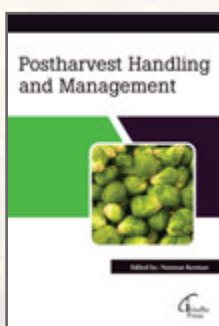


## Forage Crops: Current Perspectives

*Editor: Liva Chain*

Providing latest information on crop forms, fertilization, management, morphological, physiological aspects, nutritional quality for the animal, conservation, among others, this book draws on the expertise of different specialists of the area, who discuss the following aspects: fertilization, semiarid region production, forage species selection, nitrogen fixation, grasses, legumes, cacti, drought, etc. Providing important information and diverse perspectives on the subject of forage farming, this book will be of interest to plant biologists and scientists and researchers in fields such as biochemistry, botany, microbiology, ecology, and evolutionary biology.

Print ISBN: 978-1-68251-477-1 | \$150 | 2019 | Hardcover



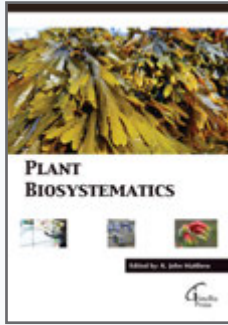
## Postharvest Handling and Management

*Editor: Norman Kerman*

Postharvest handling is becoming more important, which is the main determinant of the postharvest losses. The present book is intended to provide useful and scientific information about postharvest handling of different produce. The book also explores current challenges—including oversupply, waste, food safety, lack of resources, sustainability—and best practices for production to thrive in spite of these challenges. Therefore, it is of utmost importance to efficiently handle, store, and utilize produce to be able to feed the world, reduce the use of natural resources, and help to ensure sustainability.

Print ISBN: 978-1-68251-478-8 | \$160 | 2019 | Hardcover



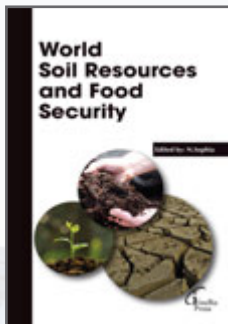


## Plant Biosystematics

*Editor: K. John Matthew*

To bridge the specific subject areas in plant systematics and evolution, encompassing evolutionary, phylogenetic, and genomic and biogeographically studies, this compendium reviews the current field of biosystematics, particularly the evolution of natural biota, and how plant biosystematics can contribute to the welfare of humans. A wide ranging biosystematic interest puts emphasis with the help of cytological and cytogenetic methods on getting to know chromosome variation within the family, genus and species connected with the phenomena of hybridization and polyploidization.

Print ISBN: 978-1-68251-479-5 | \$150 | 2019 | Hardcover

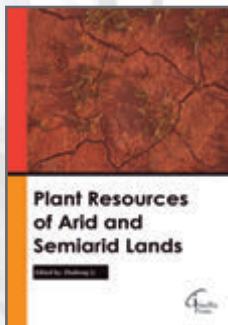


## World Soil Resources and Food Security

*Editor: N. Sophia*

Examining the current status of soils across the globe and their potential for food production to meet the needs of the World's population in the 21st Century, this book evaluates the impact of soil degradation of food security as well as past and present effects of soil degradation. Future effects of soil degradation and threats to developing-country food security are also examined. Policymakers and others with an understanding of the depth, complexity and immediacy of this crisis will find this book valuable; it also offers soil researchers and practitioners working in this area.

Print ISBN: 978-1-68251-480-1 | \$150 | 2019 | Hardcover



## Plant Resources of Arid and Semiarid Lands

*Editor: Zhuhong Li*

An anthology of world-wide contributors that evaluates the existing native plant resources in the arid and semiarid regions; this book provides an overview of arid and semi-arid lands conditions, their general characteristics, and methods of management, conservation, exploitation and reclamation. The book also discusses the biotic and abiotic factors affecting the composition and dynamics of annual plant populations and communities. This book will be of valuable to environmentalists, ecologists, sociologist, anthropologists, and researchers involved in biological and environmental conservation.

Print ISBN: 978-1-68251-481-8 | \$155 | 2019 | Hardcover



## Wheat: Chemistry and Utilization

*Editor: NS Riley*

This book serves as a valuable guide for all those involved in the research, development, formulation, and evaluation of wheat-based food products, including the cereal chemist, as well as chemists and food technologists in those industries. The nutritional value of wheat is extremely important as it takes an important place among the few crop species being extensively grown as staple food sources. The book presents state of the art review of wheat chemistry, processing and uses. It provides the reader with extensive new information on wheat components that will be useful in better commercial utilization of wheat and the formulation of new and upgraded wheat-based food products.

Print ISBN: 978-1-68251-482-5 | \$150 | 2019 | Hardcover



## Biological Control of Pest and Vector Insects

*Editor: Evelyn N. Martin*

Biocontrol has been generally shown to be safe to plants, animals, humans and the environment. The book is intended to reports on biotechnologies dealing with the elucidation and use of genes or gene products for the enhancement of biological control agents. Additionally, interest in biological control has increased over recent decades due to an increase in number of arthropod pests that developed resistance to one or more pesticides leaving growers to search for alternative management strategies. This book summarizes the efficacy, advantages and safety of using biological agents to suppress and control damage done to crops by insects.

Print ISBN: 978-1-68251-483-2 | \$155 | 2019 | Hardcover



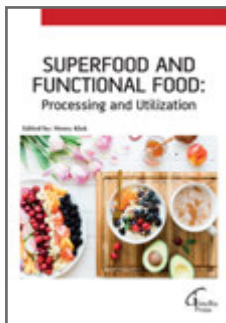


## Wetland Soils: Genesis, Landscapes, Hydrology

*Editor: Joseph K. Pungi*

The hydrology, soils, and watershed processes of a wetland all interact with vegetation and animals over time to create the dynamic physical template upon which a wetland's ecosystem is based. This book covers all aspects of wetland soil studies, from coastal and inland wetlands to human-made wetlands, from wetland plants to waterbirds, and from wetlands of international importance to management strategy. The book provides useful information on the wide perspective concerning this topic to researchers, scientists, and decision makers.

Print ISBN: 978-1-68251-484-9 | \$155 | 2019 | Hardcover



## Superfood and Functional Food - Processing and Utilization

*Editor: Henry Klok*

Super foods are considered to be beneficial for health and wellbeing, whereas functional foods are fortified or enhanced foods that may provide a health benefit beyond the traditional nutrient they contain. This book focuses on the usage and application of plant- and animal-based food products with significant functional properties and health benefits as well as their development into processed food. An essential reading for food scientists, researchers, and professionals who are developing, researching, or working with functional foods and ingredients in the food, drug, and dietary supplement industry.

Print ISBN: 978-1-68251-485-6 | \$150 | 2019 | Hardcover

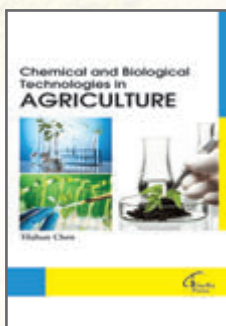


## Wastewater Management for Irrigation: Principles and Practices

*Editor: Ivan Gacovski*

For centuries, wastewater has been improperly used in agriculture, presenting potential risks to public health and the environment. This book deals with systems of wastewater irrigation practices around the world, covering different climate zones apart from showing casing practices for sustainable irrigation practices and more efficient ways of conveying irrigation waters - the life blood of agriculture, undoubtedly the most important sector in the world. Thus, this book presents literature review that addresses the effects, both positive and negative, of wastewater use in agriculture, emphasizing the effects on the soil environment.

Print ISBN: 978-1-68251-486-3 | \$155 | 2019 | Hardcover

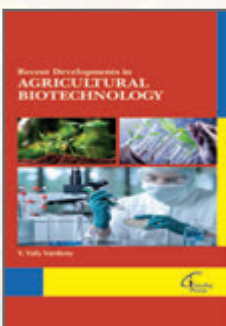


## Chemical and Biological Technologies in Agriculture

*Editor: Tilahun Chen*

The use of new technologies is occurring at fast pace, however with different level of advancement in the world, in particular for innovative breeding (new plant breeding techniques), but also other new technologies such as nanotechnologies. Crop biotechnologies have developed incrementally over the past century, but progress has accelerated greatly over the last two decades leading to many important scientific achievements and impressive technological advances. This comprehensive guide provides the latest chemical and biochemical knowledge and how this can be employed to practical applications in agriculture, concerning the issues of how we will sustain a growing world population. The purpose of this book is to examine options from crop biotechnologies to address food insecurity world-wide, particularly in the context of deepening economic and environmental uncertainty.

Print ISBN: 978-1-68251-333-0 | \$155 | 2018 | Hardcover



## Recent Developments in Agricultural Biotechnology

*Editor: Y. Valy Vardeny*

Biotechnology has led to a number of powerful tools in addition to genetic engineering that are useful for changing the genetic composition of plants and animals. This work summarizes the commercial applications of agricultural biotechnology, the state of research, and the economic and environmental impacts of applications to date; identifies the main regulatory consequences; reviews the public reactions; and considers the implications for agriculture and food security in less-developed countries. This book is designed for students interested in careers as laboratory or research technicians in plant biotechnology, breeding, genetics, or physiology. It can also be excellent preparation for graduate study.

Print ISBN: 978-1-68251-334-7 | \$160 | 2018 | Hardcover



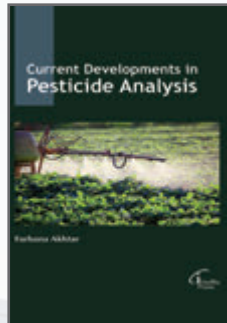


## Organic Fertilizers: Types, Production and Environmental Impact

*Editor: G. Alhassan*

Organic fertilizers such as manure have been used in agriculture for thousands of years; ancient farmers did not understand the chemistry involved, but they did recognize the benefit of providing their crops with organic material. Interest in organic farming is growing worldwide as sustainable agricultural practice nowadays. Organic fertilizers are sustained sources of nutrients due to slow release during decomposition. This book provides comprehensive information in field of organic farming and fertilizers. The adverse effects of modern agricultural practices on the farm and also on the health of living beings and thus on the environment has been well documented all over the world. This book will be of interest to researchers and students from all over the world to attain new and interesting results in the field of organic farming and food production.

Print ISBN: 978-1-68251-344-6 | \$155 | 2018 | Hardcover

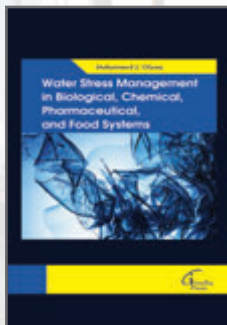


## Current Developments in Pesticide Analysis

*Editor: Farhana Akhtar*

Use of chemical pesticides is authoritative for the management of insects in agricultural and disease spread, weeds and injurious microbes. Monitoring and estimating pesticide residue in crop plants, food, soil, water and other ecosystem has become important in the recent concern on environment and ecosystem. This book presents a professional look on the recent achievements and emerging trends in pesticides analysis, including pesticides identification and characterization. It addresses issues associated with pesticides classification, pesticides properties and environmental risks, and pesticides safe management, and provides a general overview on the advanced chromatographic and sensors- and biosensors-based methods for pesticides determination.

Print ISBN: 978-1-68251-345-3 | \$155 | 2018 | Hardcover

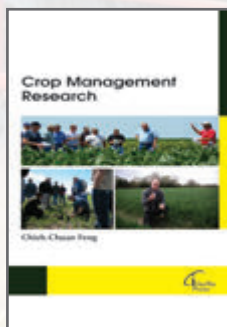


## Water Stress Management in Biological, Chemical, Pharmaceutical, and Food Systems

*Editor: Mohammed J. Olama*

Water is a critical ingredient in pharmaceutical and chemical manufacturing operations; consistent and high-quality supplies are needed for a range of purposes including production, material processing, and cooling. This work provides a holistic description and discussion of up-to-date topics on the role of water in Biological, Chemical, Pharmaceutical and Food systems within a frame of an integrated approach and future trends on the subject contributed by the renowned researchers and scholars about the state of water and phase transitions in a variety of substrates. This book will be of beneficial to students and researchers understanding in improved raw materials, products and processes in the food, agro food or related industries.

Print ISBN: 978-1-68251-346-0 | \$155 | 2018 | Hardcover

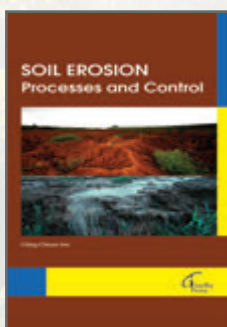


## Crop Management Research

*Editor: Chieh-Chuan Feng*

Importance of wise usage of water, nutrient management, and tillage in the agricultural sector for sustaining agricultural growth and slowing down environmental degradation calls for urgent attention of researchers, planners, and policy makers. Crop models allow researchers to promptly take a chance on the long-term concerns of changes in agricultural practices. This book examines frequently used and alternate crop production techniques and systems and estimates them with respect to crop yield, profit, environmental and ecological concerns, and agricultural sustainability. The book will prove a comprehensive guide for students interested in agronomy, crop production, and plant, soil, and pest management. Crop scientists or agronomists involved in improving food, feed, and fiber production may find valuable this resource. It may be helpful for graduates qualify for careers in agribusiness, corporate and technical farm management, professional consulting, research, and sales positions.

Print ISBN: 978-1-68251-347-7 | \$150 | 2018 | Hardcover



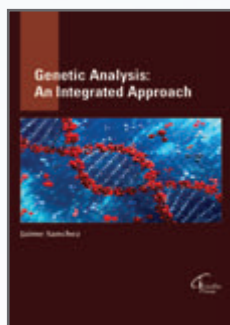
## Soil Erosion Processes and Control

*Editor: Ching-Chiuan Yen*

Erosion is a complex natural process that has often been accelerated by human activities such as land clearance, agriculture, construction, surface mining, and urbanization. Soil erosion by water and wind affects both agriculture and the natural environment, and is one of the most important of today's environmental problems. This work discusses soil erosion mechanisms, factors affecting soil erosion, the current status of soil erosion, and the impacts of soil erosion on water quality. Small and large runoff plots and field-scale monitoring methods with or without rainfall simulation were explained. Chapters' topics are various, ranging from irrigation practices to soil nutrient, land use changes or tillage methodologies.

Print ISBN: 978-1-68251-348-4 | \$155 | 2018 | Hardcover



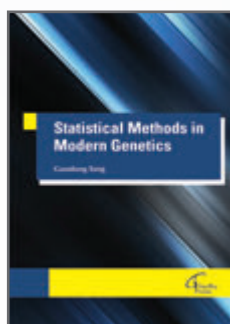


## Genetic Analysis: An Integrated Approach

*Editor: Jaime Sanchez*

The study of genes has proved to be a powerful approach to understanding biological systems. Because genes affect virtually every aspect of the structure and function of an organism, being able to identify and determine the role of genes and the proteins that they encode is an important step in charting the various processes that underly a particular character under investigation. This book presents insight into the modern tools of genome editing, their hurdles and their huge potential. The purpose of the book is to provide a glimpse into the dynamic process of genetic analysis by presenting the thoughts of scientists who are engaged in the generation of new idea and techniques employed for the assessment of genetic diversity, often from very different perspectives. The book will appeal to students, researchers, and experts in the area of conservation biology, genetic diversity, and molecular biology.

Print ISBN: 978-1-68251-362-0 | \$155 | 2018 | Hardcover

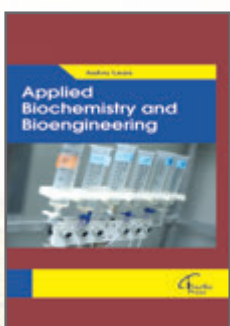


## Statistical Methods in Modern Genetics

*Editor: Guodong Tang*

Statistical genetics has played a pivotal role for more than a century in the discovery of genes that cause disease in humans. Driven by advances in molecular genetics and medicine and the continuing improvements in genotyping technology, statistical models and methods have adapted over time to the challenges presented by new study designs. This book emphasizes on the statistical models and methods that are used to understand genetics, following the historical and recent developments of genetics. It provides an overview of the range of statistical methods that can be used to answer different immunological study questions. In addition, it discusses specific aspects of immunological studies and give examples of typical scientific questions related to immunological data.

Print ISBN: 978-1-68251-363-7 | \$155 | 2018 | Hardcover



## Applied Biochemistry and Bioengineering

*Editor: Audrey Launa*

Biochemistry covers a range of scientific disciplines, including genetics, microbiology, forensics, plant science and medicine. Because of its breadth, biochemistry is very important and advances in this field of science over the past 100 years have been staggering. This book describes the techniques for the isolation and purification of intracellular and extracellular enzymes for use on an industrial scale. It deals with immobilized enzyme processes, with an emphasis on immobilized glucose isomerase and the amylolytic enzymes related to the production of high-fructose syrups from starch. This book will be useful to those using, or teaching, biotechnology. It provides an extensive review of the literature on immobilized cells and organelles and, provides pointers to the most suitable immobilization techniques for a wide variety of systems.

Print ISBN: 978-1-68251-376-7 | \$145 | 2018 | Hardcover

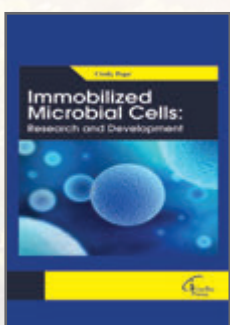


## Immobilization of Enzymes and Cells

*Editor: Cassie Avilla*

Enzymes have extensive applications in food industries such as baking, dairy products, starch conversion and beverage processing. In textile industries, they have found a special place due to their effect on end products. This book covers new and simplified conventions useful for industrial applications, innovative techniques that will prove useful now or in the near future, and conventions for the preparation of immobilized derivatives suitable for a wide variety of nonconventional reaction media. The authors also offer tools for the development of new immobilization techniques, methods for preparing immobilized derivatives for therapeutic and industrial use, and new chemical reactors designed to overcome the limitations of immobilized derivatives.

Print ISBN: 978-1-68251-377-4 | \$145 | 2018 | Hardcover



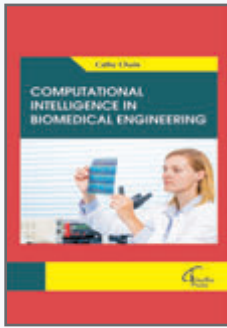
## Immobilized Microbial Cells: Research and Development

*Editor: Cindy Pope*

The cell immobilization emerged as a substitute for enzyme immobilization. Immobilization of cells covering specific enzymes has further advantages such as elimination of long and expensive procedures for enzymes separation and purification and it is vital to expand their application by enabling easy separation and purification of products from reaction mixtures and efficient recovery of catalyst. This book presents the potential of immobilized microbial cells for biological treatment, the fundamentals, history and advantages of immobilized cells compared with suspended cells, characteristics of support materials and the principal methods of immobilization, with special emphasis for natural immobilization by cell adsorption. The cell immobilization process has also triggered the interest in bioreactor design.

Print ISBN: 978-1-68251-378-1 | \$145 | 2018 | Hardcover





## Computational Intelligence in Biomedical Engineering

*Editor: Cathy Chain*

In recent years, there has been an explosion of interest in computational intelligence (CI) techniques as evidenced by numerous applications in various fields. Biomedical research and applications have benefited enormously as a result of applications of such tools and techniques. Most such scientific literature concerning the application of CI for modeling and pattern recognition are scattered around the world in different journals and conference proceedings. This work provides useful applications and information on the benefits of applying computation intelligence techniques to improve medical diagnostics. Individual contributions also cover medical decision making support, estimation of risks of treatments, reliability of medical systems, problems of practical clinical applications and many other topics. This book is intended for experts interested in problems of Biomedical Technologies, for researchers and academic staff, for all dealing with Biomedical and Medical Informatics, as well as PhD students.

Print ISBN: 978-1-68251-379-8 | \$145 | 2018 | Hardcover

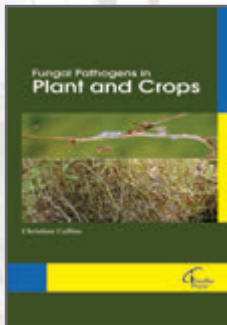


## Molecular Biotechnology: Applications and Strategies

*Editor: Craig Cook*

Biotechnological research and development are moving at a very fast rate. The subject has assumed greatest importance in recent years in the development of agriculture and human health. The science of biotechnology has endowed us with new tools and tremendous power to create novel genes and genotypes of plants and animals. This is a practical, up-to-date guide to this rapidly growing field. Therapeutic Applications and Strategies applies the principles of modern biotechnology to developments and trends in the development of therapeutic strategies and approaches to disease prevention and intervention. By focusing on select applications and strategies, this issue exemplifies the convergence of biological, chemical, and informational advances in the discovery of novel targets and drugs.

Print ISBN: 978-1-68251-392-7 | \$150 | 2018 | Hardcover



## Fungal Pathogens in Plant and Crops

*Editor: Christian Collins*

As the pace of biotic homogenization has accelerated over time, the threat of novel phytopathogens has become a question of growing importance for mycologists and plant pathologists. The impact that fungi have with regards to plant health, food loss, and human nutrition is staggering. It is essential to recognize infection of plants by microbial pathogens as rapidly as possible, preferably before the appearance of symptoms to eliminate the infected plants or planting materials to avoid disease incidence and to restrict further spread of the disease(s). This book provides an overview of current information of some plant-pathogen interactions in economically important crops, emphasizing the importance of pathogenic fungi on fruits, cereals, postharvest crops and the establishment of plant.

Print ISBN: 978-1-68251-391-0 | \$150 | 2018 | Hardcover

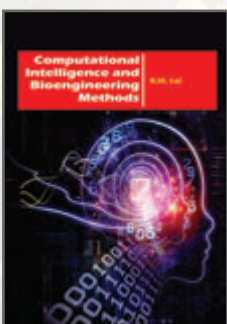


## Genes, Genomes, Genetics, and Chromosomes

*Editor: Hellen Gilbert*

A gene is a locus of DNA which is made up of nucleotides and is the molecular unit of heredity. A genome is the genetic material of an organism. It consists of DNA. The genome includes both the genes, the noncoding DNA and the genomes of the mitochondria and chloroplasts. Genetics is the study of genes, genetic variation, and heredity in living organisms. It is generally considered a field of biology, but it intersects frequently with many of the life sciences and is strongly linked with the study of information systems. This book provides a comprehensive treatment of all aspects of plant gene expression.

Print ISBN: 978-1-68251-265-4 | \$155 | 2017 | Hardcover



## Computational Intelligence and Bioengineering Methods

*Editor: R.H. Lai*

Computational intelligence is a set of nature-inspired computational methodologies and approaches to address complex real-world problems to which mathematical or traditional modelling can be useless for a few reasons: the processes might be too complex for mathematical reasoning, it might contain some uncertainties during the process, or the process might simply be stochastic in nature. This book provides a unique look at how techniques in computational intelligence can offer solutions in modelling, relationship pattern recognition, clustering, and other problems particular to the bioengineering.

Print ISBN: 978-1-68251-240-1 | \$145 | 2017 | Hardcover





## Global Governance of Genetic Resources: Agricultural Crop Issues and Policies

*Editor: Walter Lopez*

Genetic resources refer to genetic material of actual or potential value. Genetic material is any material of plant, animal, microbial or other origin containing functional units of heredity. A crop is any cultivated plant, fungus, or alga that is harvested for food, clothing, livestock fodder, biofuel, medicine, or other uses. In contrast, animals that are raised by humans are called livestock, except those that are kept as pets. Microbes, such as bacteria or viruses, are referred to as cultures. This book focuses on agricultural crop issues and policies.

Print ISBN: 978-1-68251-241-8 | \$145 | 2017 | Hardcover

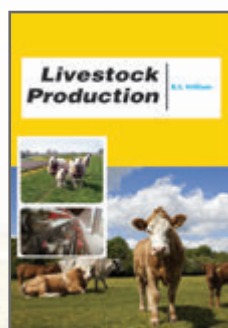


## Landscaping and Horticulture

*Editor: C. C. Baruah*

Landscaping is a profession which involves manipulating the natural environment in an area to make it look a certain way. Horticulture is the branch of agriculture that deals with the art, science, technology, and business of growing plants. Landscaping deals mainly with the design and construction of environment elements, while horticulture takes in aspects of ecology, conversation, restoration, trees and vegetation. This book focuses on landscaping and horticulture.

Print ISBN: 978-1-68251-242-5 | \$145 | 2017 | Hardcover



## Livestock Production

*Editor: R.S. William*

Livestock are domesticated animals raised in an agricultural setting to produce commodities such as food, fiber and labor. Livestock are defined as being useful animals; which implies a commercial purpose, or being reared for financial gain. This book focuses on intensive livestock production for the production of meat, milk, and eggs.

Print ISBN: 978-1-68251-243-2 | \$155 | 2017 | Hardcover



## Nematode Management in Plants

*Editor: Maria Simpson*

Nematodes are the most numerous multicellular animals on earth. A handful of soil will contain thousands of the microscopic worms, many of them parasites of insects, plants or animals. Nematodes have adapted to live in every possible environment, consuming bacteria, fungi, protozoans, and the contents of other animals or plants. This book covers principles involved in control of plant parasitic nematodes and points to research avenues that might lead to improved methods for environmentally safe biocontrol approach in the near future.

Print ISBN: 978-1-68251-266-1 | \$155 | 2017 | Hardcover



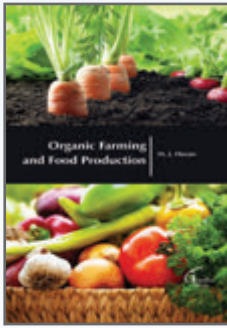
## Agricultural Genetics Resources

*Editor: John Pitto*

Genetic resources refer to genetic material of actual or potential value. Genetic material is any material of plant, animal, microbial or other origin containing functional units of heredity. The economic costs and benefits associated with the conservation and sustainable use of genetic resources of actual or potential value for food and agriculture is largely unknown. Economic instruments that can encourage implementation of socially optimal genetic resource conservation strategies as well as the sharing of the real benefits and costs are a useful measurement tool. This book addresses some of the key issues involved in the estimation of the economic value of conserving genetic resources for agriculture.

Print ISBN: 978-1-68251-267-8 | \$155 | 2017 | Hardcover



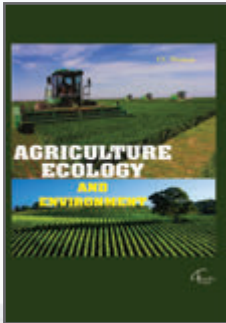


## Organic Farming and Food Production

*Editor: M. J. Husan*

Organic farming is a form of agriculture that developed from a desire to improve soil quality and the environment, and from a strong rejection of the use of synthetic chemicals and fertilizers in agriculture. Food production is the process of transforming raw ingredients into prepared food products. This book deals with organic farming and food production.

Print ISBN: 978-1-68251-244-9 | \$155 | 2017 | Hardcover



## Agriculture Ecology and Environment

*Editor: T.S. Thomas*

Agriculture is the cultivation of animals, plants and fungi for food, fiber, biofuel, medicinal plants and other products used to sustain and enhance human life. Ecology is the scientific analysis and study of interactions among organisms and their environment. It is an interdisciplinary field that includes biology, geography, and earth science. Environment encompasses all living and non-living things occurring naturally on Earth or some region thereof. This book deals with the interface between agriculture and the environment.

Print ISBN: 978-1-68251-245-6 | \$145 | 2017 | Hardcover



## Advance Process Biotechnology

*Editor: David Baker*

Process biotechnology practice has advanced substantially in recent years. Advances have taken place not only with microbes or microbial systems, but also with mammalian, animal and plant cell culture systems. This book covers biological, ecological, chemical, and biochemical engineering topics related to the subject. It provides much needed theory-based solved numerical problems for practice in quantitative evaluation of various parameters relevant to process biotechnology.

Print ISBN: 978-1-68251-246-3 | \$160 | 2017 | Hardcover



## Comparative Genomics

*Editor: Lee Heller*

Comparative genomics is a field of biological research in which the genomic features of different organisms are compared. The genomic features may include the DNA sequence, genes, gene order, regulatory sequences, and other genomic structural landmarks. This book provides an overview of computational analysis of genes and genomes, and of some most notable findings that come out of this work.

Print ISBN: 978-1-68251-247-0 | \$155 | 2017 | Hardcover



## Bacterial Systematics

*Editor: S. Mushegian*

Bacterial systematics can be defined as the scientific study of the kinds and diversity of bacterial microorganisms and their relationship. This book provides a comprehensive treatment of concepts, ideas, and methods that make up the subject of modern bacterial systematics. It includes not only traditional numerical and chemotaxonomic methods, but also full coverage of molecular systematics.

Print ISBN: 978-1-68251-248-7 | \$155 | 2017 | Hardcover



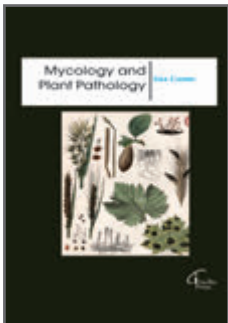


## Alternative Farming

*Editor: Allan Graham*

Alternative agriculture emphasizes management practices that take advantage of natural processes, improve the match between cropping patterns and agronomic practices on the one hand and the productive potential and physical characteristics of the land on the other, and make selective use of commercial fertilizer and pesticides to ensure production efficiency and conservation of soil, water, energy, and biological resources. This book analyzes current agricultural issues, and proposes alternative solutions, to build safe agriculture, energy and food systems for future generations.

Print ISBN: 978-1-68251-249-4 | \$155 | 2017 | Hardcover

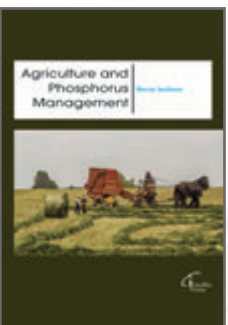


## Mycology and Plant Pathology

*Editor: Lisa Gamm*

Mycology is the branch of biology concerned with the study of fungi, including their genetic and biochemical properties, their taxonomy and their use to humans as a source for tinder, medicine, food, and entheogens, as well as their dangers, such as poisoning or infection. Plant pathology is the scientific study of diseases in plants caused by pathogens and environmental conditions. This book provides extensive coverage of abiotic, fungal, viral, bacterial, nematode and other plant diseases and their associated epidemiology. It also covers the genetics of resistance and modern management on plant disease.

Print ISBN: 978-1-68251-250-0 | \$155 | 2017 | Hardcover

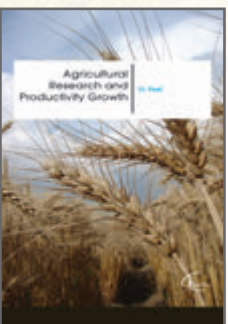


## Agriculture and Phosphorus Management

*Editor: Rozar Jackson*

Agriculture is the cultivation of animals, plants and fungi for food, fiber, biofuel, medicinal plants and other products used to sustain and enhance human life. Phosphorus, an essential element for plant and animal growth, has long been recognized as necessary to eliminate deficiencies and to maintain profitable crop and livestock production. It can increase the biological productivity of surface waters by accelerating eutrophication. This book discusses the impact and management of phosphorus in watersheds.

Print ISBN: 978-1-68251-251-7 | \$155 | 2017 | Hardcover



## Agricultural Research and Productivity Growth

*Editor: D. Paul*

Agricultural research can be broadly defined as any research activity aimed at improving productivity and quality of crops by their genetic improvement, better plant protection, irrigation, storage methods, farm mechanization, efficient marketing, and a better management of resources. Agricultural productivity is measured as the ratio of agricultural outputs to agricultural inputs. This book focuses on agricultural research and productivity growth.

Print ISBN: 978-1-68251-252-4 | \$155 | 2017 | Hardcover



## Basics of Micropropagation

*Editor: W. Richar*

Micropropagation is the practice of rapidly multiplying stock plant material to produce a large number of progeny plants, using modern plant tissue culture methods. Micropropagation is used to multiply noble plants such as those that have been genetically modified or bred through conventional plant breeding methods. This book provides detailed procedures for propagating plants.

Print ISBN: 978-1-68251-253-1 | \$150 | 2017 | Hardcover





## Carbohydrate Metabolism

*Editor: F. Donald*

Carbohydrate metabolism denotes the various biochemical processes responsible for the formation, breakdown and interconversion of carbohydrates in living organisms. The most important carbohydrate is glucose, a simple sugar known as monosaccharide that is metabolized by nearly all known organisms. Glucose and other carbohydrates are part of a wide variety of metabolic pathways across species: plants synthesize carbohydrates from carbon dioxide and water by photosynthesis storing the absorbed energy internally, often in the form of starch or lipids. This book covers almost all the aspects of carbohydrates metabolism.

Print ISBN: 978-1-68251-254-8 | \$155 | 2017 | Hardcover



## Ecological Entomology

*Editor: Husan Ali*

Entomology is the scientific study of insects, a branch of zoology. In the past, the term “insect” was vaguer, and historically the definition of entomology included the study of terrestrial animals in other arthropod groups or other phyla, such as arachnids, myriapods, earthworms, land snails, and slugs. This book covers insect growth and development, what they eat, how they reproduce, and how they move in various environments.

Print ISBN: 978-1-68251-255-5 | \$155 | 2017 | Hardcover



## Concepts in Ethnobotany

*Editor: Iqbal Hasan*

Ethnobotany is a specialized branch of plant science that aims to understand the complex relationships between human beings and plant life. Different cultures of the past and the present have discovered a variety of uses for their indigenous plants. People use plants for food, medicine, shelter, clothing, cosmetics, and in religious rituals, among many other uses. Public interest in ethnobotany is on the rise due to conservation concerns and increasing appeal in the potential benefits of natural foods and medicines. This book presents the recent concepts in ethnobotany.

Print ISBN: 978-1-68251-256-2 | \$150 | 2017 | Hardcover

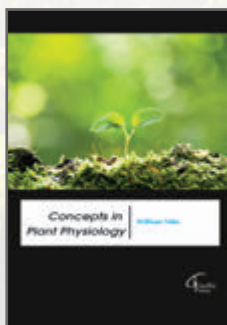


## Physiology of Plant Cells

*Editor: James Albard*

Plant cells are eukaryotic cells that differ in several key aspects from the cells of other eukaryotic organisms. Plant physiology is a subdiscipline of botany concerned with the functioning, or physiology, of plants. Closely related fields include plant morphology, plant ecology, phytochemistry, cell biology, genetics, biophysics and molecular biology. This book provides a clear, well-illustrated introduction to the physiology and biochemistry of plant cell.

Print ISBN: 978-1-68251-257-9 | \$150 | 2017 | Hardcover



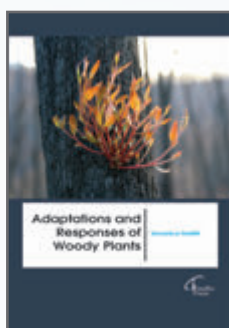
## Concepts in Plant Physiology

*Editor: William Nike*

Plant physiology is the study of the function, or physiology of plants. The field of plant physiology includes the study of all the internal activities of plants—those chemical and physical processes associated with life as they occur in plants. It includes the study of biological and chemical processes of individual plant cells. This book discusses the fundamental concepts in plant physiology.

Print ISBN: 978-1-68251-258-6 | \$150 | 2017 | Hardcover





## Adaptations and Responses of Woody Plants

*Editor: Veronica Smith*

A woody plant is a plant that produces wood as its structural tissue. Woody plants are usually either trees, shrubs, or lianas. These are usually perennial plants whose stems and larger roots are reinforced with wood produced from secondary xylem. This book covers the latest and most significant advances in woody plant stress research.

Print ISBN: 978-1-68251-259-3 | \$155 | 2017 | Hardcover

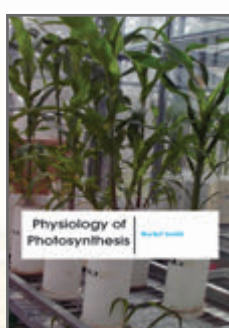


## Physiology of Fungi

*Editor: Susan Gordon*

A fungus is any member of the group of eukaryotic organisms that includes unicellular microorganisms such as yeasts and molds, as well as multicellular fungi that produce familiar fruiting forms known as mushrooms. Fungus physiology is the study of living fungi, their functions and activities in relation to their environments. This book focuses on processes at the plasma membrane, considering the modulating effects of the fungal wall and describing the fate of nutrients entering the fungus.

Print ISBN: 978-1-68251-260-9 | \$150 | 2017 | Hardcover

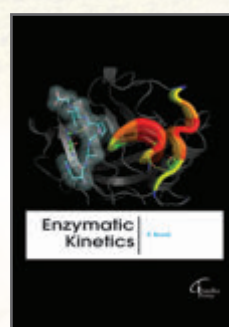


## Physiology of Photosynthesis

*Editor: Rachel Smith*

Photosynthesis is a process used by plants and other organisms to convert light energy, normally from the Sun, into chemical energy that can be later released to fuel the organisms' activities. Photosynthesis takes place inside chloroplasts, special organelles located in the cells of plants and other photosynthesizing organisms. This book deals with physiology of photosynthesis.

Print ISBN: 978-1-68251-261-6 | \$150 | 2017 | Hardcover



## Enzymatic Kinetics

*Editor: P. Brand*

Enzyme kinetics is the study of the chemical reactions that are catalyzed by enzymes. In enzyme kinetics, the reaction rate is measured and the effects of varying the conditions of the reaction are investigated. Enzymes are usually protein molecules that manipulate other molecules—the enzymes' substrates. This book offers an understanding of the behavior of enzyme systems and the diagnostic tools used to characterize them and determine kinetic mechanisms.

Print ISBN: 978-1-68251-262-3 | \$155 | 2017 | Hardcover



## Algal Biotechnology and Its Importance

*Editor: Martin Anderson*

Algal biotechnology is a technology developed using algae. This can be further divided into microalgae technology and macroalgae technology. This book examines the utilization of algae for the development of useful products and processes with the emphasis towards green technologies and processes, and the requirements to make these viable. It covers various aspects of algal biotechnology from the basics to large scale cultivation, harvesting and processing for a variety of products.

Print ISBN: 978-1-68251-263-0 | \$155 | 2017 | Hardcover





## Concepts of Plant Anatomy

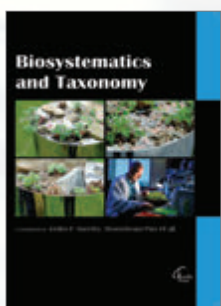
*Editor: Raza Khan*

Plant anatomy is the study of the physical structure of plants. It is also known as phytoanatomy. Plant anatomy is now frequently investigated at the cellular level, and often involves the sectioning of tissues and microscopy. This book presents the basic concepts and terminology of plant anatomy with a special emphasis on its significance and applications to other disciplines, and addresses the central role of anatomy.

Print ISBN: 978-1-68251-264-7 | \$150 | 2017 | Hardcover





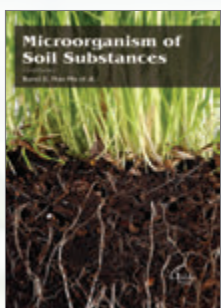


### Biosystematics and Taxonomy

*Contributors: Indira P. Sarethy, Sharadwata Pan et al.*

This book provides classical as well as modern information about taxonomy, the science of classifying and naming animals and plants. Biological systematics is the study of the diversification of living forms, both past and present, and the relationships among living things through time. Relationships are visualized as evolutionary trees. Phylogenies have two components, branching order and branch length. Systematic biology is the field that provides scientific names for organisms, describes them, preserves collections of them, provides classifications for the organisms, keys for their identification, and data on their distributions.

Print ISBN: 9781682510490 | \$170 | Pub Year: 2016 | Hardcover



### Microorganism of Soil Substances

*Contributors: Baoyi Ji, Hao Hu et al.*

Soil microorganisms breakdown a variety of organic materials and use a portion of these breakdown products to generate or synthesize a series of compounds that make up humus, a dark coloured amorphous substance composed of residual organic matter not readily decomposed by microorganisms. This book covers a favorable habitat for microorganisms and is inhabited by a wide range of microorganisms, including bacteria, fungi, algae, viruses and protozoa.

Print ISBN: 9781682511077 | \$170 | Pub Year: 2016 | Hardcover



### Genesis & Properties of Soil

*Contributors: Marian Marschalko, Işık Yilmaz et al.*

Soil genesis is the mode of soil formation that deals with special reference to the soil-forming factors responsible for development of the solum, or true soil: time, parent material, topography, climate and organisms. The scope of this book is encompassing the concept of pedology, is an evolving discipline devoted to understanding how soil differ in form and function.

Print ISBN: 9781682511060 | \$170 | Pub Year: 2016 | Hardcover

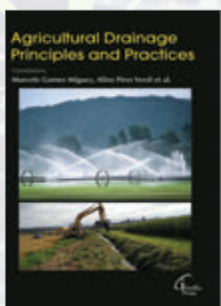


### Advances in Horticulture Science Research

*Contributors: Arvind Bijalwan et al.*

Horticulture is the branch of agriculture that deals with the art, science, technology, and business of vegetable garden plant growing. It differs from botany and other plant sciences in that horticulture incorporates both science and aesthetics. This book introduces the key concepts such as plant propagation, media, nutrients and fertilizers, plants and the environment, plant growth regulators, post-harvest physiology and pest management, greenhouse structures, nursery site selection, development and facilities, producing nursery crops.

Print ISBN: 9781682511756 | \$180 | Pub Year: 2016 | Hardcover



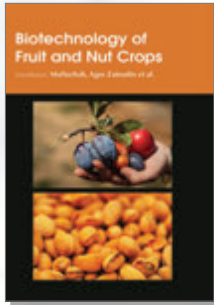
### Agricultural Drainage Principles and Practices

*Contributors: Marcelo Gomes Miguez, Aline Pires Veról et al.*

Agricultural drainage is a system by which the water level on or in the soil is controlled to enhance agricultural crop production. Also these are systems that make it easier for water to flow from the land, so that agriculture can benefit from the subsequently reduced water levels. The scope of this book is to identify the require principle and practices in agriculture drainage system.

Print ISBN: 9781682511763 | \$170 | Pub Year: 2016 | Hardcover





### Biotechnology of Fruit and Nut Crops

*Contributors: Maftuchah, Agus Zainudin et al.*

Fruit and nut crops need a constant supply of boron during all growth stages, especially during flowering, and nut and fruit development. Fruit and nut crop will undoubtedly make a major contribution to increasing the quantity, improving the quality and ensuring the sustainability of agriculture. This book presents a comprehensive reference work on the current status of biotechnology of the major temperate, subtropical and fruit and nut crop species of the world.

Print ISBN: 9781682511794 | \$170 | Pub Year: 2016 | Hardcover



### Agronomy of Tropical Fruit Crops

*Contributors: Suyare Araújo Ramalho, Nayjara Carvalho Gualberto et al.*

Agronomy is a science and a practice that looks at agriculture from an integrated, holistic perspective. The area of agronomy involves selective breeding of plants to produce the best crops under various conditions. It examines the more specialist tropical fruits such as guava, durian, mangoes teen, passion fruits and palm fruits. This book also reviews these injurious and beneficial organisms and how injurious and beneficial organisms might be controlled to enhance fruit production and quality.

Print ISBN: 9781682511770 | \$170 | Pub Year: 2016 | Hardcover

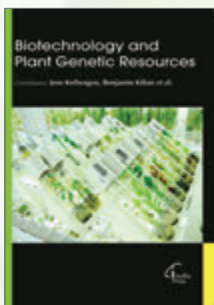


### Handbook of Medicinal Spices

*Contributors: Il-Suk Kim, Mi-Ra Yang et al.*

Spice is defined as a strongly flavored or aromatic substance of vegetable origin, obtained from tropical plants, commonly used as a condiment. Some of the main spices used in food are Turmeric, Pepper, Cinnamon, Cumin, Ginger, Bay leaf, Cloves, Cardamom, Fenugreek, Garlic etc. Apart from using these spices as culinary ingredients they are also used for medicinal purposes. This book focuses on the importance role of spices, which are important medicines that have withstood the empirical tests of millennia.

Print ISBN: 9781682511800 | \$190 | Pub Year: 2016 | Hardcover



### Biotechnology and Plant Genetic Resources

*Contributors: Jens Keilwagen, Benjamin Kilian et al.*

Plant genetics is a very broad term, there are many facets of genetics in general, and of course there are many facets to plants. Genetic in plant is of fundamental importance in the continuity of a species as it provides the necessary adaptation to the prevailing biotic and abiotic environmental conditions. The purpose of the book is to provide a glimpse into the dynamic process of genetic variation by presenting the thoughts and presenting the generation of new ideas and techniques employed for the assessment of genetic diversity, often from very different perspectives.

Print ISBN: 9781682511787 | \$170 | Pub Year: 2016 | Hardcover



### Crop Improvement Strategies and Applications

*Contributors: Jocelyn A. Moore and Caryl A. Chlan et al.*

Crop production is one of the most important sectors in the world, both for physical and economic health. Crop production refers to the various processes applied toward the effective cultivation and harvesting of crops. In order for crops to grow very well, it may be necessary to apply some form of fertilizer as a nutrient boost. This book provides an information on "omics" of plants that covers genomics, proteomics and metabolomics, molecular techniques for crop improvement, gene silencing, and marker-assisted selection for crops.

Print ISBN: 9781682511817 | \$170 | Pub Year: 2016 | Hardcover



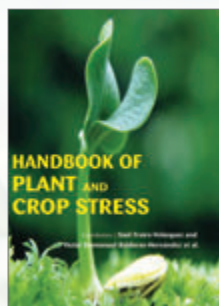


### Floriculture: Fundamentals and Practices

*Contributors: Chang Ha Park, Soo Cheon Chae et al.*

Floriculture is a branch of horticulture concerned with the propagation of ornamental plants, with a focus on flowering plants specifically. It includes cultivation of flowering and ornamental plants for direct sale or for use as raw materials in cosmetic and perfume industry and in the pharmaceutical sector. This book provides the production of planting materials through seeds, cuttings, budding and grafting also it can be defined as the art and knowledge of growing flowers to perfection.

Print ISBN: 9781682511824 | \$170 | Pub Year: 2016 | Hardcover



### Handbook of Plant and Crop Stress

*Contributors: Saúl Fraire-Velázquez and Victor Emmanuel Balderas-Hernández et al.*

A stress in crop production is considered as something that decreases yield, and a growth promoter is something that increases yield. In other words, a stress is an external factor that decreases crop yields from yield maximum to a lower level. This book facilitates the dynamic and expanding knowledge of environmental stresses and their effects on plants and crops.

Print ISBN: 9781682511855 | \$190 | Pub Year: 2016 | Hardcover

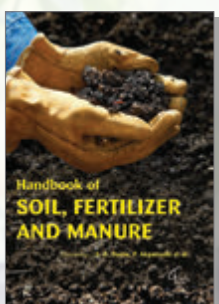


### Greenhouse Technology and Management

*Contributors: César Hernández, José del Sagrado et al.*

Greenhouse is a structure with walls and roof made chiefly of transparent material, such as glass, in which plants requiring regulated climatic conditions are grown. Whereas greenhouse farming is a term used to define virtually any major agriculture endeavor that is carried out using greenhouses. This book presents the knowledge about plant production grown in plastic greenhouse conditions, and covers growing techniques such as fertilization and plant protection and up-to-date management practices.

Print ISBN: 9781682511831 | \$170 | Pub Year: 2016 | Hardcover

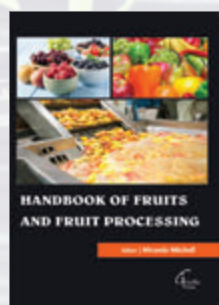


### Handbook of Soil, Fertilizer and Manure

*Contributors: S. O. Dania, P. Akpansubi et al.*

Soil is the mixture of minerals, organic matter, gases, liquids, and the countless organisms that together support life on Earth. Whereas fertilizer is any material of natural or synthetic origin that is applied to soils or to plant tissues to supply one or more plant nutrients essential to the growth of plants, on other side manure is organic matter, mostly derived from animal feces except in the case of green manure, which can be used as organic fertilizer in agriculture. This book basically provides the information about the use of fertilizer and manure in soil science.

Print ISBN: 9781682511862 | \$190 | Pub Year: 2016 | Hardcover



### Handbook of Fruits and Fruit Processing

*Editor: Miranda Mitchell*

Fruit can go through numerous types of processing, including canning, drying, and juicing. Some types of fruit processing are fruit preserves, canned fruit, and fruit juices. It is generally not as healthy as fresh, raw fruit. This book covers the latest developments and research efforts in this field that are aimed at improving production methods, post-harvest storage and processing, safety, quality and developing new processes and products.

Print ISBN: 9781682511848 | \$190 | Pub Year: 2016 | Hardcover





### Handbook of Vegetable Pests

*Contributors: Regina W. Mwanauta, Kelvin M. Mtei et al.*

Vegetables are an important element in the culture and economy of the world. Pests often are an important constrain on vegetable production. Veg pests plague everyone who has ever raised vegetables, from backyard gardener to professional horticulturists, farm managers, and agribusiness professionals. This book Identifies guides list for the major and minor pests of each crop family and provide distinguishing characteristics for each pest.

Print ISBN: 9781682511879 | \$190 | Pub Year: 2016 | Hardcover



### Insect, Pest and Disease Management

*Contributors: Eula Dalton et al.*

Pests and diseases often infiltrate even healthy gardens. It is important to regularly check the plants for spreading diseases or signs of pest damage. This book consist of important pest and diseases practices and management of cash cereals, oilseed, vegetables, fodders, fruits and pulses etc.

Print ISBN: 9781682511886 | \$170 | Pub Year: 2016 | Hardcover

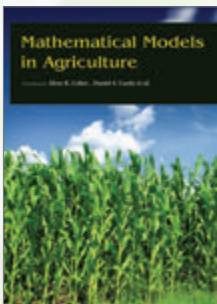


### Modern Plant Pathology

*Contributors: Dartanhã José Soares et al.*

Plant pathology is the scientific study of diseases in plants caused by pathogens and environmental conditions. It also involves the study of pathogen identification, disease etiology, disease cycles, economic impact, plant disease epidemiology, plant disease resistance. This book is intended to provide a theoretical treatment of plant pathology and broad ecological relationships among organisms.

Print ISBN: 9781682511916 | \$170 | Pub Year: 2016 | Hardcover

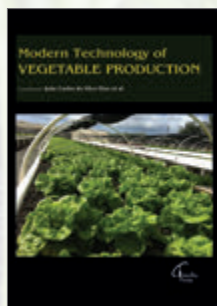


### Mathematical Models in Agriculture

*Contributors: Elroy R. Cober , Daniel F. Curtis et al.*

Agriculture is the cultivation of animals, plants, fungi, and other life forms for food, fiber, and biofuel, medicinal and other products used to sustain and enhance human life. This book provides a general overview of recent developments and mathematical model into types of systems and their uses in the agricultural industry.

Print ISBN: 9781682511893 | \$170 | Pub Year: 2016 | Hardcover



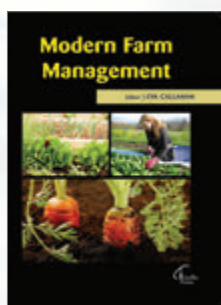
### Modern Technology of Vegetable Production

*Contributors: João Carlos da Silva Dias et al.*

Vegetables are rich and comparatively cheaper source of vitamins. The value of vegetables as an important article of daily human diet has come to be recognized all over the world. Vegetables are sold at a higher rate than other crops also it provides regular as well as good source of income in addition to the income from the agronomic crops. So the vegetable production is become very successful business present time. This book deals with modern vegetable production with extensive photographic documentation is the new addition in the teaching and demonstrative field of vegetable science.

Print ISBN: 9781682511923 | \$170 | Pub Year: 2016 | Hardcover



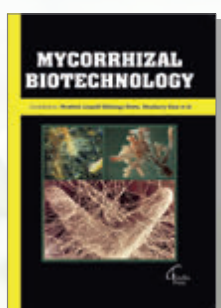


### Modern Farm Management

*Editor: Eva Callahan et al.*

Farm management is the collective term for various management strategies and methods that are employed to keep a farm productive and profitable. This book deals with the organization and operation of a farm with the objectives of maximizing profit from the farm business on a continuing basis.

Print ISBN: 9781682511909 | \$170 | Pub Year: 2016 | Hardcover



### Mycorrhizal Biotechnology

*Contributors: Ibrahima Léopold Djitiningo Diatta, Aboubacry Kane et al.*

Mycorrhizal is a symbiotic association composed of a fungus and roots of a vascular plant. In a mycorrhizal association, the fungus colonizes the host plant's roots, either intracellularly as in arbuscular mycorrhizal fungi, or extracellularly as in ectomycorrhizal fungi. This book emphasizes the biotechnological application of mycorrhizae to promote the production of food while maintaining ecologically and economically sustainable production systems.

Print ISBN: 9781682511930 | \$180 | Pub Year: 2016 | Hardcover



### Plant Tissue Culture Techniques and Experiments

*Editor: Josie Ho*

Plant tissue culture is a collection of techniques used to maintain or grow plant cells, tissues or organs under sterile conditions on a nutrient culture medium of known composition. Plant tissue culture is widely used to produce clones of a plant in a method known as micropropagation. Different techniques in plant tissue culture may offer certain advantages over traditional methods of propagation. This book provides a diverse learning experience and techniques appropriate for students, researchers, and professionals.

Print ISBN: 9781682511947 | \$170 | Pub Year: 2016 | Hardcover

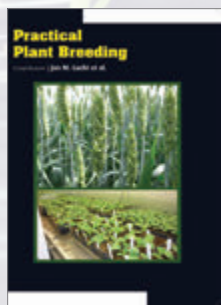


### Understanding Plant Anatomy

*Contributors: Fumitaka Shiotsu, Jun Abe et al.*

Plant anatomy is the study of the physical structure of plants. It is also known as phytoanatomy, with a practitioner of this scientific discipline being known as a phytoanatomist. This book highlights the important contribution made by studying anatomy to the solutions of a number of present and future problems.

Print ISBN: 9781682511985 | \$170 | Pub Year: 2016 | Hardcover



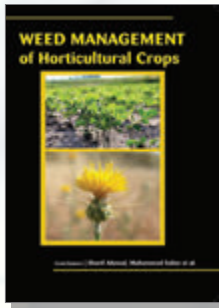
### Practical Plant Breeding

*Editor: Jan M. Lucht*

Plant breeding is the art and science of changing the traits of plants in order to produce desired characteristics. The objective of this book is to present some of the recent advances of plant breeding, exemplifying novel views, approaches, research efforts, achievements, challenges and perspectives in breeding of some crop species.

Print ISBN: 9781682511961 | \$170 | Pub Year: 2016 | Hardcover



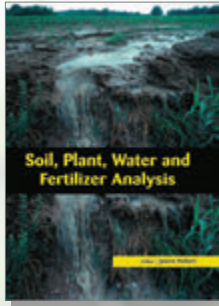


## Weed Management of Horticultural Crops

*Contributors: Sharif Ahmed, Muhammad Salim et al.*

Weed Science present significant topics of research that examine a number of options that can be utilized to develop successful and sustainable weed management systems for many areas of crop production. This book furnishes information on the mode of action of herbicides and encompasses the effect of herbicides on important groups of horticultural crops.

Print ISBN: 9781682511992 | \$170 | Pub Year: 2016 | Hardcover

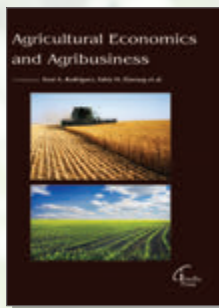


## Soil, Plant, Water and Fertilizer Analysis

*Editor: Juana Hebert*

In recent year's soil, plant, water and fertilizers analysis has become a scientific approach for understanding the problems related to soil, water, plants and fertilizers. This book reveals procedures for the analysis of chemical constituents in soil, plant, water, fertilizer, animal manure and compost samples. It will also prove as a beneficial tool for soil testing, quality control and laboratories of allied fields.

Print ISBN: 9781682511978 | \$170 | Pub Year: 2016 | Hardcover

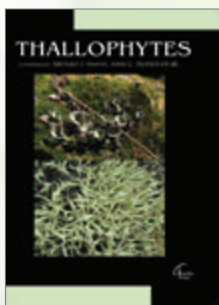


## Agricultural Economics and Agribusiness

*Contributors: Xosé A. Rodríguez, Yahia H. Elasaag et al.*

Agribusiness includes the production, processing, and supply of agricultural goods that range from lettuce to corn syrup. It includes agrochemicals, breeding, crop production, distribution, farm machinery, processing, and seed supply, as well as marketing and retail sales. This book includes the most current data available on such topics as the description of the food and fiber system, the effects of the agribusiness, and economical factors on agriculture.

Print ISBN: 9781682512043 | \$170 | Pub Year: 2016 | Hardcover

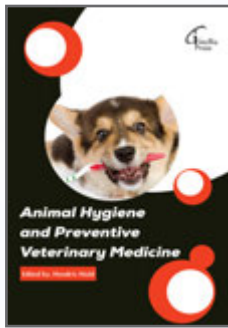


## Thallophytes

*Contributors: Michael J. Sweet, John C. Bythell et al.*

The thallophytes are a polyphyletic group of non-mobile organisms. They were a defunct division of Kingdom Plantae that included fungus, lichens and algae and occasionally bryophytes, bacteria and the myxomycota. They were a defunct division of Kingdom Plantae that included fungus, lichens and algae and occasionally bryophytes, bacteria and the Myxomycota. They have a hidden reproductive system and hence they are also called cryptogamae, as opposed to phanerogamae. The book focuses on reproductive system and physical characteristics of thallophytes.

Print ISBN: 9781682510414 | \$170 | Pub Year: 2016 | Hardcover



## Animal Hygiene and Preventive Veterinary Medicine

*Editor: Hendrix Wold*

Safeguarding animal health care considerations should take into account not only the veterinary-technical and zootechnical issues, but also the microbiological and epidemiological disease aspects, managerial and economic relevance, and furthermore product and production process quality assurance related features. This book focuses on the epidemiology of domestic and wild animals, costs of epidemic and endemic diseases of animals, the latest methods in veterinary epidemiology, disease control or suppression by public veterinary services, relationships between veterinary medicine and animal production, and development of new techniques in diagnosing, recording, evaluating and controlling diseases in animal populations.

Print ISBN: 978-1-68251-487-0 | \$150 | 2019 | Hardcover

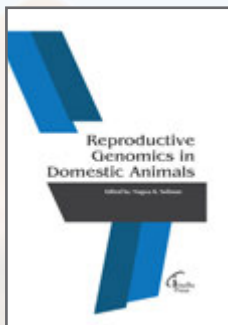


## Veterinary Research and Medicine: Challenges and Perspectives

*Editor: Jason Henry*

Without proper animal health practices there will be reduce efficiency and optimal profits. This book focuses on outstanding discoveries across a wide spectrum of translational, foundational, and clinical research. This book establishes the links between specialization in the veterinary sciences and the factors that influence the use of animals in basic science and medicine, presents reviews and case studies of traditional veterinary knowledge and practice, along with historical perspectives, theoretical discussions and research methodologies.

Print ISBN: 978-1-68251-488-7 | \$155 | 2019 | Hardcover

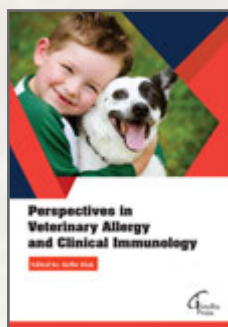


## Reproductive Genomics in Domestic Animals

*Editor: Nagwa K. Soliman*

Domestic animal genomics is of interest to a wide audience of researchers because of the utility derived from understanding how genomics and proteomics function in various organisms. This book depicts the knowledge about genetic factors affecting reproduction in livestock and available methods for studying the genetic influence on reproductive traits. The book aims to cover basic, applied, and methodological research towards a better understanding of the genetic mechanisms underlying the expression of complex phenotypes in farm animals, as well as innovative strategies for the genetic improvement of livestock species.

Print ISBN: 978-1-68251-489-4 | \$150 | 2019 | Hardcover



## Perspectives in Veterinary Allergy and Clinical Immunology

*Editor: Kellie Klok*

The purpose of the current book is to review allergic diseases across species and to focus on how these diseases compare to the counterpart in people. The book provides essential, practical information for solving dermatological problems commonly encountered in small animals. Various stressors, including both psychological as well as physiological, have been demonstrated to influence the immune response, presumably through activation of the hypothalamic-pituitary-adrenal axis and sympathetic nervous system.

Print ISBN: 978-1-68251-490-0 | \$155 | 2019 | Hardcover



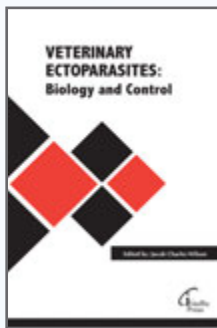
## Advances in Veterinary Dermatology

*Editor: E. J. Chan*

Veterinarians are confronted with a variety of food and nutrition-related skin diseases, with cutaneous food adverse reaction the most common in small animal dermatology. Representing the most recent developments in veterinary dermatology world-wide, this book presents selected topics on Veterinary Dermatology. This book also reviews animal models of AVMs and their advantages and disadvantages. The book will prove an indispensable reference for veterinary dermatologists, diagnostic pathologists, and small animal practitioners who seek to improve their skill in diagnostic dermatology.

Print ISBN: 978-1-68251-491-7 | \$155 | 2019 | Hardcover



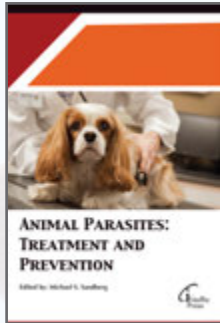


## Veterinary Ectoparasites: Biology and Control

*Editor: Jacob Charles Wilson*

Ectoparasites are of growing significance in modern veterinary medicine and a detailed understanding of the biology of these parasites is fundamental to their appropriate treatment and control. This book provides a complete overview of the biology, and behaviour of arthropod ectoparasites along with the pathology and treatment of diseases in livestock and companion animals of temperate habitats. This book will be of interest for veterinarians and parasitologists as well as researchers from the government, academia and industry.

Print ISBN: 978-1-68251-492-4 | \$150 | 2019 | Hardcover



## Animal Parasites: Treatment and Prevention

*Editor: Michael S. Sandberg*

This book is intended as a tool for the identification and control of the wide spectrum of parasites affecting domestic animals throughout the world. This book synthesizes the latest developments in the ecology and evolution of animal parasites for a new generation of parasitologists. The effective control and treatment of parasitic diseases requires rapid, reliable and highly sensitive diagnostic tests, which can also serve to monitor the effectiveness of the therapeutic and prophylactic protocol. The book is well suited as a reference guide for veterinarians, students of the veterinary and life sciences, veterinarian nurses, laboratory staff, and pet and livestock owners.

Print ISBN: 978-1-68251-493-1 | \$155 | 2019 | Hardcover



## Veterinary Clinical Pathology

*Editor: Alex Jermasek*

This book provides in-depth information about common clinical laboratory assays that are used to evaluate domestic mammals. It contains studies focused on the disease diagnosis by the examination of the bodily fluids such as urine, cavitory effusions or tissue or blood utilizing the apparatuses of science molecular pathology, hematology, microbiology and biochemistry. This book also introduces various techniques in microbiology, cytology and necropsy. This comprehensive reference guide will also prove useful to laboratory diagnosticians, veterinary pathologists and research workers in animal problems.

Print ISBN: 978-1-68251-494-8 | \$155 | 2019 | Hardcover

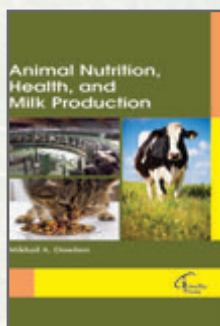


## Artificial Insemination of Farm Animals: Current and Future Trends

*Editor: K. Lombardo*

Artificial Insemination is a useful technique devised for the genetic improvement of farm animals. AI is by far the most common method of breeding intensively kept domestic livestock, such as dairy cattle, pigs and turkeys. AI is increasing in horses, beef cattle and sheep, and has been reported in other domestic species such as dogs, goats, deer and buffalo. It has also been used occasionally in conservation breeding of rare or endangered species, for example, primates, elephants and wild felids. This book is valuable tool for students and researchers as well as for interested readers.

Print ISBN: 978-1-68251-336-1 | \$155 | 2018 | Hardcover



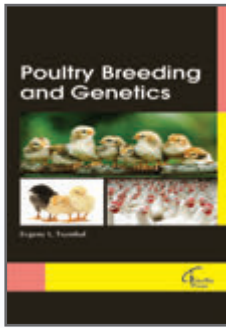
## Animal Nutrition, Health, and Milk Production

*Editor: Mikhail A. Dowben*

Feeding plays a very crucial/important role in growth, development and productivity of dairy animals. Modern breeds of dairy animals are able to produce huge amount of milk. In attempt to consume, digest and metabolize enough nutrients to satisfy lactation needs, those animals are exposed to serious stress conditions that can affect their health. This book will be of immense interest for students, researchers, as well as practitioners associated with dairy science, animal science, food science, nutrition, physiology, biochemistry, veterinary medicine and other related fields.

Print ISBN: 978-1-68251-337-8 | \$155 | 2018 | Hardcover



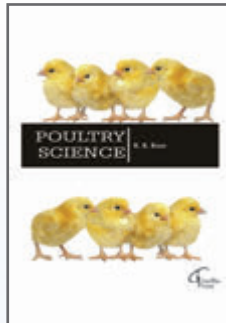


## Poultry Breeding and Genetics

*Editor: Evgeny L. Tsybal*

Poultry breeding utilizes genetic principles to accomplish the goals of poultry producers for meat or egg production. Transgenic technologies offer the promise of being able to address issues by creating new genetic variability, rather than being restricted to existing variation as with quantitative and genomics methods. This work deals with the transmission of individual characteristics of both parents to the offspring through the mechanism of heredity. This book will be beneficial for the students, teachers, researchers, farmers, and other professionals, who are interested to strengthen and expand their knowledge about chicken products in fields of poultry science, biotechnology, plant science, and agriculture.

Print ISBN: 978-1-68251-338-5 | \$155 | 2018 | Hardcover



## Poultry Science

*Editor: B. R. Rose*

Poultry are farmed and are important sources of protein throughout the world. Poultry science focuses on the application of biological and chemical principles to the production and management of poultry animals and the production and handling of poultry products. This book covers all the commercially important poultry species, including turkeys, quail, guinea fowls, ducks and geese, but the main emphasis is on the domestic fowl. It explains the science underlying the productive processes of growth, reproduction and incubation.

Print ISBN: 978-1-68251-278-4 | \$155 | 2017 | Hardcover

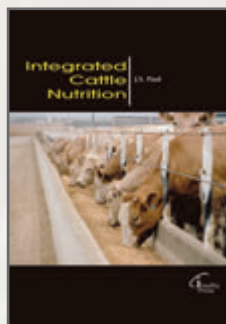


## Statistics for Veterinary and Animal Science

*Editor: W. Ball*

Interpreting statistical information and carrying out statistical procedures is an integral part of veterinary and animal science. This book provides necessary information to handle numerical data and critically appraise the statistical methodology in the fields of veterinary and animal science. Carrying out statistical procedures and interpreting the results is an integral part of veterinary and animal science.

Print ISBN: 978-1-68251-268-5 | \$155 | 2017 | Hardcover



## Integrated Cattle Nutrition

*Editor: J.S. Paul*

Nutrition is essentially as simple as understanding the nutrient requirements of cattle at various stages of lactation and combining various feed ingredients to meet those needs in a cost-effective manner. This book presents comprehensive information about how to feed cattle so that the milk and meat produced meet organic standards. It contains basic information for students in courses on feeds and feeding, dairy cattle production, and animal nutrition.

Print ISBN: 978-1-68251-269-2 | \$155 | 2017 | Hardcover



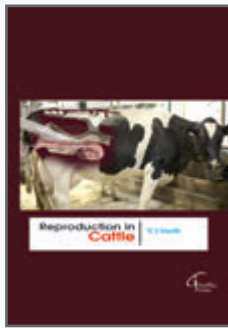
## Handbook on Mammals

*Editor: Dinesan Cheruvat*

Mammals are a clade of endothermic amniotes distinguished from reptiles and birds by the possession of a neocortex, hair, three middle ear bones and mammary glands. Mammals include the largest animals on the planet, the great whales, as well as some of the most intelligent, such as elephants, primates and cetaceans. This book provides up-to-date information on the systematic relationships, natural history, ecology, and current conservation status for all mammals.

Print ISBN: 978-1-68251-270-8 | \$160 | 2017 | Hardcover





## Reproduction in Cattle

*Editor: P. J Sturth*

Cattle play a fundamental role in animal agriculture throughout the world. The efficient management of reproduction is essential to maximize the productivity and profitability of cattle farming. This book concludes with a discussion of the principles of reproductive management and selection of cattle for breeding.

Print ISBN: 978-1-68251-295-1 | \$155 | 2017 | Hardcover

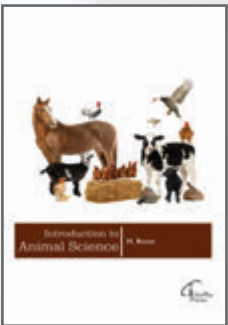


## Animal Genetics and Breeding

*Editor: Paul Brighton*

Genetics is the study of biological inheritance. Animal genetics is a foundational discipline in the fields of animal science, animal breeding, and veterinary sciences. While genetics underpins the healthy development and breeding of all living organisms, this is especially true in domestic animals, specifically with respect to breeding for key traits. This book provides a comprehensive introduction to genetic principles and their applications in animal breeding.

Print ISBN: 978-1-68251-277-7 | \$155 | 2017 | Hardcover

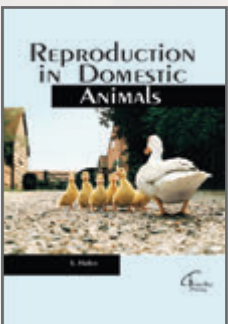


## Introduction to Animal Science

*Editor: H. Rozar*

Animal science deals with the study of non-human animals. The discipline emphasizes domestic animals, or animals that are controlled and cared for to some degree by humans. The main area of focus in animal science is the structure and function of domesticated animals. This book covers animal reproduction, genetics, nutrition, breeds, health and general management of the various livestock including some additional species that have caught the interest of agriculture.

Print ISBN: 978-1-68251-276-0 | \$155 | 2017 | Hardcover

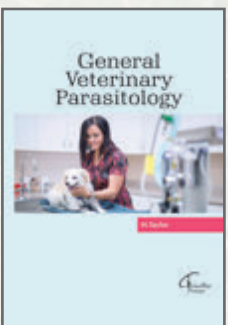


## Reproduction in Domestic Animals

*Editor: S. Hafez*

Most consumable products of animal origin, such as eggs and milk, are obtained through exploitation of the reproductive processes of livestock, making efficiency extremely important in intensive production units. This book offers comprehensive information concerning physiology, pathology, and biotechnology of reproduction in domestic animals. It provides extensive coverage of reproductive anatomy and includes avian reproduction, supplying original and often innovative figures.

Print ISBN: 978-1-68251-296-8 | \$155 | 2017 | Hardcover



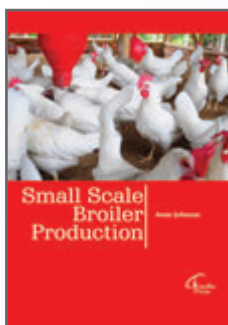
## General Veterinary Parasitology

*Editor: H. Taylor*

Veterinary parasitology is the study of animal parasites, especially relationships between parasites and animal hosts. Parasites of domestic animals, as well as wildlife animals are considered. The major goal of veterinary parasitology is to protect animals and improve their health, but because a number of animal parasites are transmitted to humans, veterinary parasitology is also important for public health. This book provides pertinent information on parasite life cycles, importance, location in the host, zoonotic potential, diagnosis, and treatment.

Print ISBN: 978-1-68251-271-5 | \$155 | 2017 | Hardcover



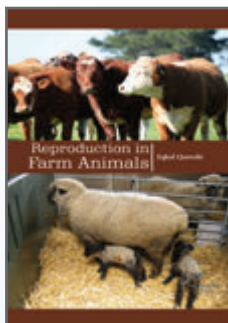


### Small Scale Broiler Production

*Editor: Anne Johnson*

Broilers are a gallinaceous domesticated fowl, bred and raised specifically for meat production. They are a hybrid of the egg-laying chicken, both being a subspecies of the red junglefowl. Typical broilers have white feathers and yellowish skin. Most commercial broilers reach slaughter-weight at between five and seven weeks of age, although slower growing breeds reach slaughter-weight at approximately 14 weeks of age. This book discusses on small scale broiler production.

Print ISBN: 978-1-68251-272-2 | \$155 | 2017 | Hardcover



### Reproduction in Farm Animals

*Editor: Eqbal Qureshi*

Reproduction is the biological process by which new individual organisms—"offspring"—are produced from their "parents". The reproductive cycle relates to various phenomena: puberty and sexual maturity, the breeding season, the estrous cycle, postpartum sexual activity, and aging. These components are regulated by environmental, genetic, physiologic, hormonal, behavioral, and psychosocial factors. The level of fertility initiated at the time of puberty is maintained for a few years before it begins to gradually decline due to aging. This book focuses on reproduction in farm animals.

Print ISBN: 978-1-68251-273-9 | \$155 | 2017 | Hardcover



### Veterinary Biostatistics

*Editor: Jade Butler*

Biostatistics is the application of statistics to a wide range of topics in biology. The science of biostatistics encompasses the design of biological experiments, especially in agriculture and veterinary; the collection, summarization, and analysis of data from those experiments; and the interpretation of, and inference from, the results. This book presents the basic principles of biostatistics in veterinary.

Print ISBN: 978-1-68251-274-6 | \$155 | 2017 | Hardcover

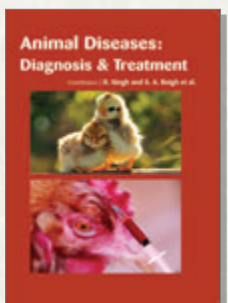


### Veterinary Microbiology

*Editor: D. Smith*

Veterinary microbiology is concerned with microbial diseases of domesticated vertebrate animals that supply food, other useful products or companionship. Microbial diseases of wild animals living in captivity, or as members of the feral fauna will also be considered if the infections are of interest because of their interrelation with humans and/or domestic animals. This book presents an introduction to microbiology and some aspects of immunology and infectious disease tailored specifically for veterinary students. It reviews basic microbiology and considers the applied aspects of antibiotic usage, vaccines, and diagnostic procedures.

Print ISBN: 978-1-68251-275-3 | \$155 | 2017 | Hardcover



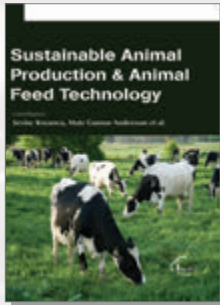
### Animal Diseases: Diagnosis & Treatment

*Contributors: R. Singh and S. A. Beigh et al.*

Animal Diseases is the branch of veterinary science that deals with the prevention, diagnosis and treatment of disease, disorder and injury in animals. Animals and Disease examines the interactions of medicine and veterinary medicine in their common quest for ways of combating and controlling epidemic diseases in man and animals. This book focuses on the different type of diseases in animals and also provides a treatment and diagnosis report on animals.

Print ISBN: 9781682511626 | \$170 | Pub Year: 2016 | Hardcover





## Sustainable Animal Production & Animal Feed Technology

*Contributors: Sevinc Koyuncu, Mats Gunnar Andersson et al.*

Animal feed is food given to domestic animals in and understanding of sustainability in animal production is becoming increasingly necessary since the global demand for food is expected to dramatically increase in the coming decades. This book outlines key issues related to sustainable animal production and feeding technology.

Print ISBN: 9781682511633 | \$170 | Pub Year: 2016 | Hardcover

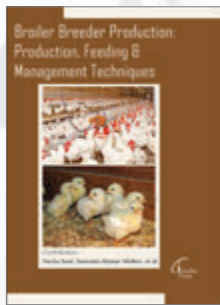


## Poultry Farming & Feed Formulations: Nutrition, Methods & Strategies of Feeding

*Contributors: Vikram Krishnasamy, Joachim Otte et al.*

Poultry farming is the raising of domesticated birds such as chickens, ducks, turkeys and geese for the purpose of farming meat or eggs for food. Poultry farming allows chickens to roam freely for a period of the day, although they are usually confined in sheds at night to protect them from predators or kept indoors if the weather is particularly bad. This book covers the feed formulation techniques in poultry farm, and also discusses about the method and strategies of feeding and different types of nutrition.

Print ISBN: 9781682511657 | \$170 | Pub Year: 2016 | Hardcover

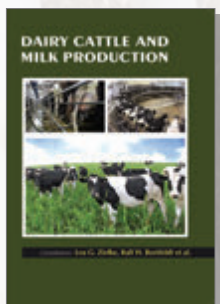


## Broiler Breeder Production: Production, Feeding & Management Techniques

*Contributors: Neeta Soni, Sumanta Kumar Mishra et al.*

Broiler is a type of chicken raised specifically for meat production. The whole broiler production process is designed for this requirement but the same inputs are at odds with those required for egg production by broiler breeders. This book consists of the management techniques for the broiler breeding production.

Print ISBN: 9781682511640 | \$170 | Pub Year: 2016 | Hardcover



## Dairy Cattle And Milk Production

*Contributors: Lea G. Zielke, Ralf H. Bortfeldt et al.*

Dairy is a business enterprise established for the harvesting or processing of animal milk mostly from cows or goats, but also from buffaloes, sheep, horses or camels – for human consumption. This book is devoted to more specific consideration of areas with aspects of genetics factors and the molecular and cellular mechanisms, animal management, and also focuses on the milk production techniques.

Print ISBN: 9781682512012 | \$170 | Pub Year: 2016 | Hardcover



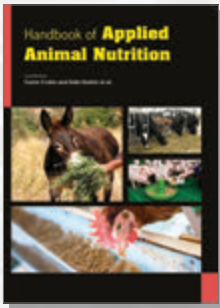
## Nutrition & Disease Management In Poultry: Advances & Researches

*Contributors: Addai-Mensah Donkor, Richard Lander Kwame Glover et al.*

Different diseases conditions and stress factors are responsible for high morbidity and mortality of present day poultry. Nutritional strategy and proper feed formulation with specific dietary regimen can combat this up to a certain extent. The incidence of various infectious diseases, nervous disorders and metabolic disorders can be minimized through proper feed regimen. There is a stiff competition and restrictions in the global market of poultry products which can be addressed with proper management of emerging and important diseases with economic productions and quality poultry products. This book envisages on the challenges today which can be suitably addressed by the right scientific and advanced nutritional manoeuvres and make the poultry farming more profitable and presentable in the global market.

Print ISBN: 9781682511664 | \$170 | Pub Year: 2016 | Hardcover



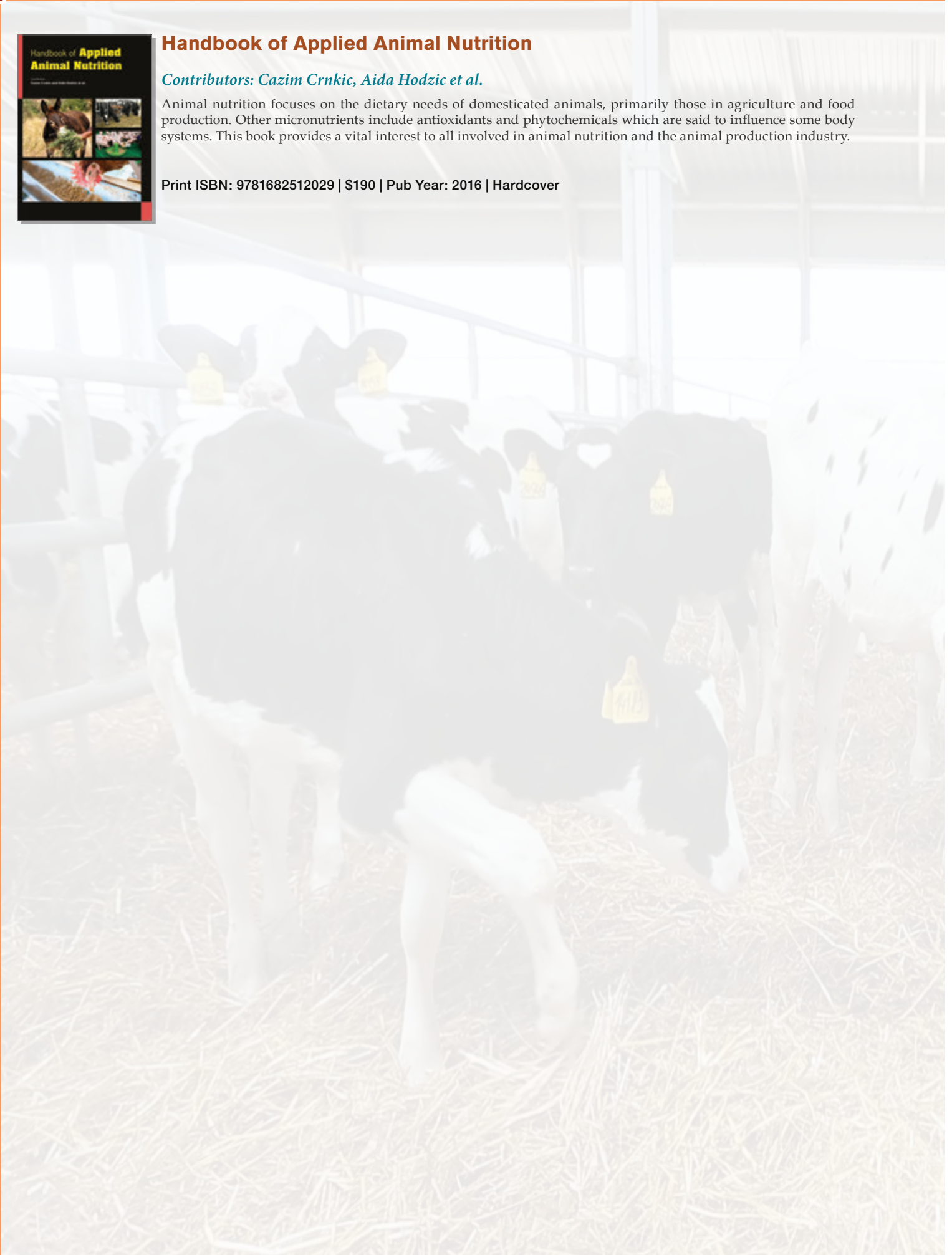


## Handbook of Applied Animal Nutrition

*Contributors: Cazim Crnkic, Aida Hodzic et al.*

Animal nutrition focuses on the dietary needs of domesticated animals, primarily those in agriculture and food production. Other micronutrients include antioxidants and phytochemicals which are said to influence some body systems. This book provides a vital interest to all involved in animal nutrition and the animal production industry.

Print ISBN: 9781682512029 | \$190 | Pub Year: 2016 | Hardcover







## Chemistry: Inorganic, Organic and Physical

*Contributors: Kalliat T. Valsaraj et al.*

Fundamentally, chemistry is the study of matter and change. The way that chemists study matter and change and the types of systems that are studied varies dramatically. Traditionally, chemistry has been broken into five main subdisciplines: Organic, Analytical, Physical, Inorganic, and Biochemistry. Organic chemistry is chemistry of carbons - from petrol and alcohol to proteins and enzymes in your body. Inorganic is basically compounds that are not carbon compounds, lots of pretty colors. Things such as transition metals, alkaline metals and the halogens are included. Physical chemistry is about how energy and atoms/molecules interact. This book covers the principles and fundamentals of inorganic, organic and physical chemistry.

Print ISBN: 9781682510094 | \$170 | Pub Year: 2016 | Hardcover



## Chemical Separations: Principles, Techniques & Applications

*Contributors: Ion Neda, Paulina Vlazan et al.*

Chemical separation is a method to achieve any mass transfer phenomenon that converts a mixture of substances into two or more distinct product mixture, at least one of which is enriched in one or more of the mixture's constituents. This book covers the principle, techniques and different application of chemical separations and also explains the principles and parameters of these methods with a minimum of mathematics.

Print ISBN: 9781682510704 | \$170 | Pub Year: 2016 | Hardcover



## Physiology and Physiological Chemistry

*Contributors: Hidemitsu Nakamura, Tadao Asami et al.*

Physiology is the scientific study of the normal function in living systems. A sub-discipline of biology, its focus is in how organisms, organ systems, organs, cells, and bio-molecules carry out the chemical or physical functions that exist in a living system. Physiological chemistry is a branch of science dealing with the chemical aspects of physiological and biological systems. The book is committed to discover, characterize, and eventually control the biochemical pathways that regulate higher-order physiological and pathological processes.

Print ISBN: 9781682510452 | \$170 | Pub Year: 2016 | Hardcover

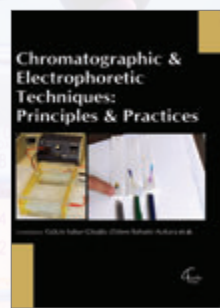


## Chemical Technology: Principles & Applications

*Contributors: Pier-Luc Tremblay, Tian Zhang et al.*

Chemical technology is the study of technology that aids in doing chemistry. To be more specific, spend a lot of time learning about analytical instruments that aid in doing chemistry. With the help of this technology design the large-scale processes that convert chemicals, raw materials, living cells, microorganisms and energy into useful forms and products. This book deals with chemical technology principles and applications that describes the subjects dealing with apparatus, unit operations, and chemical economics.

Print ISBN: 9781682510711 | \$170 | Pub Year: 2016 | Hardcover



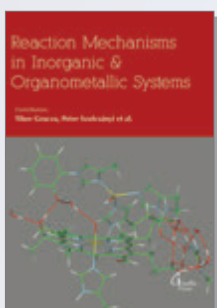
## Chromatographic & Electrophoretic Techniques: Principles & Practices

*Contributors: Gülçin Saltan Çitoğlu, Özlem Bahadır Acıkar et al.*

Chromatography is the collective term for a set of laboratory techniques for the separation of mixtures. The mixture is dissolved in a fluid called the mobile phase, which carries it through a structure holding another material called the stationary phase. On the other side electrophoretic is the motion of dispersed particles relative to a fluid under the influence of a spatially uniform electric field. This book specially focuses on the principles of chromatographic and electrographic techniques also covers the different types of practices for this techniques.

Print ISBN: 9781682510728 | \$170 | Pub Year: 2016 | Hardcover



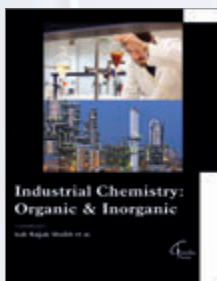


## Reaction Mechanisms in Inorganic & Organometallic Systems

*Contributors: Tibor Gracza, Peter Szolcsányi et al.*

Reaction mechanisms are the step by step sequence of elementary reactions by which overall chemical change occurs. Reaction intermediates are chemical species, often unstable and shortlived, which are not reactants or products of the overall chemical reaction, but are temporary products and reactants in the mechanism's reaction steps. This book provides excellent introductions, extensive problems, and thought-provoking summaries of classic inorganic reaction mechanisms and organometallic reaction mechanisms.

Print ISBN: 9781682510940 | \$170 | Pub Year: 2016 | Hardcover

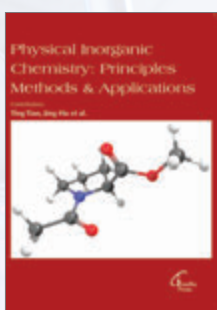


## Industrial Chemistry: Organic & Inorganic

*Contributors: Isak Rajjak Shaikh et al.*

Industrial Chemistry is the branch of chemistry which applies physical and chemical processes towards the transformation of raw materials into products that are of benefit to humanity. The book introduces the general overview of new trends in designing industrial chemical processes which are environmentally friendly and economically feasible.

Print ISBN: 9781682510926 | \$170 | Pub Year: 2016 | Hardcover

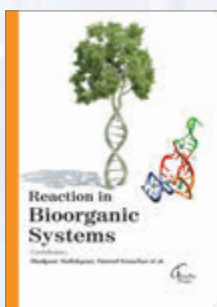


## Physical Inorganic Chemistry: Principles, Methods & Applications

*Contributors: Ting Tian, Jing Hu et al.*

The physics of inorganic chemistry covers all chemical compounds except the myriad organic compounds, which are the subjects of organic chemistry. It is the Inorganic branch of chemistry that deals with the properties and behavior of inorganic compounds. This book explores the most recent advances in this dynamic area of chemistry, with an emphasis on methods and techniques and presents the application of high pressure in the elucidation of inorganic and bioinorganic reaction mechanisms.

Print ISBN: 9781682510957 | \$170 | Pub Year: 2016 | Hardcover

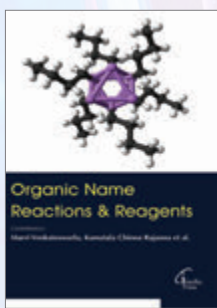


## Reaction In Bioorganic Systems

*Contributors: Shadpour Mallakpour, Hamed Yousefian et al.*

Reaction in Bioorganic Systems reviews and the results of original experimental and theoretical investigations on the structure, function, structure-activity relation, and synthesis of biopolymers, such as proteins, nucleic acids, polysaccharides, mixed biopolymers, and their complexes, and low-molecular-mass biologically active compounds.

Print ISBN: 9781682511121 | \$170 | Pub Year: 2016 | Hardcover

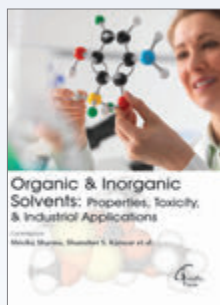


## Organic Name Reactions & Reagents

*Contributors: Marri Venkateswarlu, Kamatala Chinna Rajanna et al.*

Organic name reactions are chemical reactions involving organic compounds, these are combustion of organic fuels and saponification of fats to make soap. Each reaction has a stepwise reaction mechanism that explains how it happens, although this detailed description of steps is not always clear from a list of reactants alone. This book provides a handy resource for navigating the web of named reactions and reagents and includes three indices based on reagents and reactions, starting materials, and desired products.

Print ISBN: 9781682510964 | \$170 | Pub Year: 2016 | Hardcover

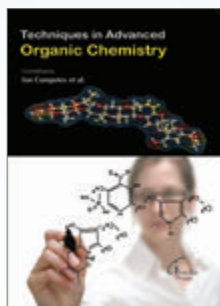


## Organic & Inorganic Solvents: Properties, Toxicity & Industrial Applications

*Contributors: Shivika Sharma, Shamsher S. Kanwar et al.*

Organic solvents are not like organic fruits or vegetables that require the stringent monitoring of pesticides or poisons. Whereas inorganic solvent is a solvent other than water, that is not an organic compound, also it is used in chemical research and industry for reactions that cannot occur in aqueous solutions or require a special environment. This book offers an elementary approach to certain theoretical concepts of properties, toxicity and industrial applications.

Print ISBN: 9781682510971 | \$170 | Pub Year: 2016 | Hardcover

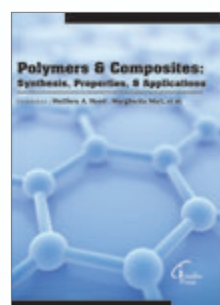


## Techniques In Advanced Organic Chemistry

*Contributors: Ian Cumpstey et al.*

Advances organic chemistry is a branch of chemistry that involves the study of the structures, composition, and synthesis of carbon-containing compounds, it is important to note that all organic molecules include not only carbon, but also hydrogen. This book offers the broad coverage of the structure, reactivity and synthesis of organic compounds and explaining all basics required for understanding organic mechanisms and that too very precisely.

Print ISBN: 9781682511022 | \$170 | Pub Year: 2016 | Hardcover

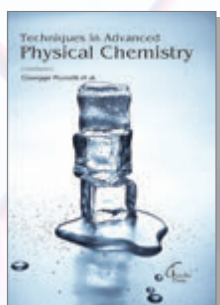


## Polymers & Composites: Synthesis, Properties, & Applications

*Contributors: Matthew A. Hood, Margherita Mari et al.*

Polymers are a large molecule, or macromolecule, composed of many repeated subunits. Its range from familiar synthetic plastics such as polystyrene to natural biopolymers such as DNA and proteins that are fundamental to biological structure and function. This book evaluate the properties synthesis and also categorizes the different application of polymers.

Print ISBN: 9781682510988 | \$170 | Pub Year: 2016 | Hardcover



## Techniques in Advanced Physical Chemistry

*Contributors: Giuseppe Pezzotti et al.*

Physical chemistry is the study of macroscopic, atomic, subatomic, and particulate phenomena in chemical systems in terms of laws and concepts of physics. It is therefore the foundation upon which all other fields of chemistry rests, and this science is also relevant to virtually all other scientific fields. The scope of this book is limited to selected topics within the field of physical chemistry and use of this techniques in different fields.

Print ISBN: 9781682511039 | \$170 | Pub Year: 2016 | Hardcover



## Laboratory Techniques & Experiments in Chemistry

*Contributors: Yili Kang, Mingjun Chen et al.*

Laboratory techniques are the sum of procedures used on natural sciences such as chemistry, biology, and physics in order to conduct an experiment. It provides controlled conditions in which scientific or technological research, experiments, and measurement may be performed. This book deals with general information about work in chemistry laboratory, viz., safety, first aid, different types of apparatus and their assemblies used for various types of reactions, stirring arrangements, heating techniques and low temperature experiments.

Print ISBN: 9781682511015 | \$170 | Pub Year: 2016 | Hardcover





### Applied Physical Chemistry

*Contributors: Sanaa T. Arab, Mohammed I. Abdulsalam et al.*

This book applies the principles, practices and concepts of physics such as motion, energy, force, time, thermodynamics, quantum chemistry, statistical mechanics and dynamics, equilibrium. This book presents the various categories of high performance materials and their composites and provides up-to-date synthesis details, properties, characterization, and applications for such systems to give readers and users better information to select the required material.

Print ISBN: 9781682511053 | \$170 | Pub Year: 2016 | Hardcover

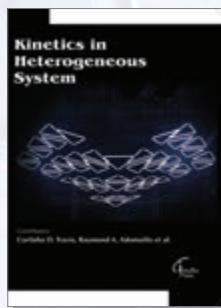


### Characterization Techniques In Catalysts

*Contributors: Ting Ma, Hiroyuki Imai et al.*

Catalyst is any substance that works to accelerate a chemical reaction, it can be organic, synthetic or metal. Catalysis is the increase in the rate of a chemical reaction due to the participation of an additional substance called a catalyst. These are also important in the laboratory as well as in manufacturing and industry. This book includes all major areas of heterogeneous and homogeneous catalysis as well as specific applications of catalysis such as, kinetics and experimental techniques such as microcalorimetry.

Print ISBN: 9781682511091 | \$170 | Pub Year: 2016 | Hardcover



### Kinetics in Heterogeneous System

*Contributors: Curtisha D. Travis, Raymond A. Adomaitis et al.*

A system, in chemistry, is any group of atoms, molecules, ions, & substances. A system can either be homogeneous or heterogeneous. A chemical system is called heterogeneous system that contains various distinct and mechanically separable parts or phases, such as a suspension. In a heterogeneous system, substances are combined such that their components are easily distinguished and their distribution is not constant. This book emphasizes the reaction kinetics in heterogeneous system.

Print ISBN: 9781682511138 | \$170 | Pub Year: 2016 | Hardcover

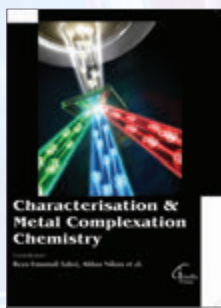


### Surface & Interfacial Chemistry

*Contributors: W. Russ Algar, Ulrich J. Krull et al.*

Surface chemistry defined as the study of chemical reactions at interfaces, which aims at modifying the chemical composition of a surface by incorporation of selected elements or functional groups that produce various desired effects or improvements in the properties of the surface or interface. Whereas interfacial chemistry examines the processes in a montmorillonite model system and illustrates the kinetic aspects of interfacial reactions. This book presents the area of surface or interface chemistry, has embraced studies that range all the way from observation of individual atoms to macroscopic phenomena investigated with the ordinary light microscope.

Print ISBN: 9781682511107 | \$170 | Pub Year: 2016 | Hardcover

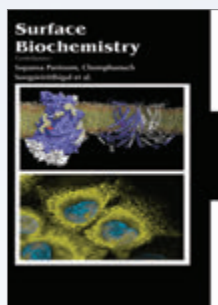


### Characterisation & Metal Complexation Chemistry

*Contributors: Reza Emamali Sabzi, Abbas Nikoo et al.*

Characterisation, when used in materials science, refers to the broad and general process by which a material's structure and properties are probed and measured. It is a fundamental process in the field of materials science, without which no scientific understanding of engineering materials could be ascertained. While many characterisation techniques have been practiced for centuries, such as basic optical microscopy, new techniques and methodologies are constantly emerging. This book gives an emphasis on characterisation techniques in material science.

Print ISBN: 9781682511145 | \$170 | Pub Year: 2016 | Hardcover

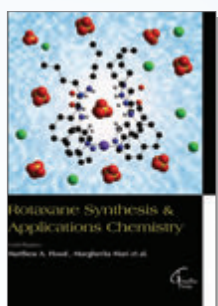


## Surface Biochemistry

*Contributors: Supansa Pantoom, Chomphunuch Songsiriritthigul et al.*

In biochemistry and pharmacology, a receptor is a protein molecule usually found embedded within the plasma membrane surface of a cell that receives chemical signals from outside the cell. When such chemical signals bind to a receptor, they cause some form of cellular/tissue response, e.g. a change in the electrical activity of the cell. In this sense, a receptor is a protein molecule that recognizes and responds to endogenous chemical signals, e.g. the acetylcholine receptor recognizes and responds to its endogenous ligand, acetylcholine. Cell surface receptors regulate a multitude of biological pathways required for cell growth, differentiation, proliferation, and survival. This book envisages on the biochemistry of cell surface receptors.

Print ISBN: 9781682511114 | \$170 | Pub Year: 2016 | Hardcover

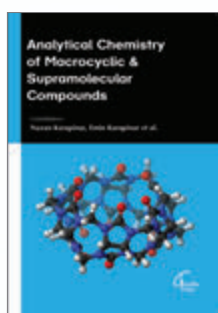


## Rotaxane Synthesis & Applications Chemistry

*Contributors: Matthew A. Hood, Margherita Mari et al.*

Rotaxane is a mechanically interlocked molecular architecture consisting of a dumbbell shaped molecule which is threaded through a macrocycle. The synthesis of a rotaxane rely on the statistical probability that if two halves of a dumbbell-shaped molecule were reacted in the presence of a macrocycle that some small percentage would connect through the ring. Rotaxane synthesis categories in three pare, which are: Capping, clipping and slipping. This book concerns with rotaxanes and other mechanically interlocked molecular architectures, such as catenanes, has been focused on their efficient synthesis or their utilization as artificial molecular machines.

Print ISBN: 9781682511152 | \$170 | Pub Year: 2016 | Hardcover

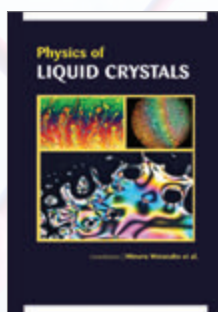


## Analytical Chemistry of Macrocyclic & Supramolecular Compounds

*Contributors: Nazan Karapinar, Emin Karapinar et al.*

Macrocyclic is the more narrowly as a cyclic molecule with three or more potential donor atoms that can coordinate to a metal center. Whereas supramolecular focuses on the chemical systems made up of a discrete number of assembled molecular subunits or components. This book provides a comprehensive account, and devoted to the analytical chemistry of macrocyclic (crown ethers), macrobicyclic (cryptands) and the supramolecular compounds (calixarene and calyx (n) resocrinereameand Rotaxanes).

Print ISBN: 9781682511169 | \$170 | Pub Year: 2016 | Hardcover



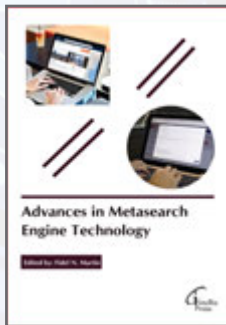
## Physics of Liquid Crystals

*Contributors: Minoru Watanabe et al.*

Liquid crystals (LCs) are matter in a state that has properties between those of conventional liquid and those of solid crystal. There are many different types of liquid-crystal phases, which can be distinguished by their different optical properties. Liquid crystals can be divided into thermotropic, lyotropic and metallotropic phases. Examples of liquid crystals can be found both in the natural world and in technological applications. Most contemporary electronic displays use liquid crystals. Lyotropic liquid-crystalline phases are abundant in living systems. This book discusses the properties and sollicitations of liquid crystals.

Print ISBN: 9781682510292 | \$170 | Pub Year: 2016 | Hardcover



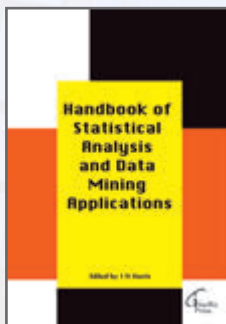


## Advances in Metasearch Engine Technology

*Editor: Fidel N. Martin*

Search engines have become a useful part of a daily routine when it comes to searching for information on the Internet. This book is intended to give an overview of information retrieval and show how different types of search tools work as the Metasearch engine has changed from being a simple collection of search results into formatting them into new and innovative ways. This book covers innovative and up-to-date studies in large-scale Metasearch engine technology, which has the potential to overcome the limitations of the major search engines.

Print ISBN: 978-1-68251-495-5 | \$155 | 2019 | Hardcover



## Handbook of Statistical Analysis and Data Mining Applications

*Editor: I N Harris*

Statistical methods are invariably needed, however, in order to extract meaningful information from experimental data. This book provides recent research results in data analysis, classification and multivariate statistics and highlights perspectives for new scientific developments within these areas. An ideal reference for users who want to address massive and complex datasets with novel statistical approaches and be able to objectively evaluate analyses and solutions.

Print ISBN: 978-1-68251-496-2 | \$165 | 2019 | Hardcover

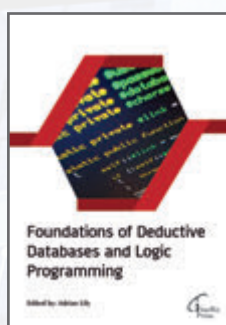


## Information Security and Computer Fraud

*Editor: KATI Holbrooke*

In this age living without access to the information of interest at any time, any place through countless types of devices has become unimaginable. However, its security has become more important than information access itself. Therefore, this book aims to present a number of innovative security enhanced applications. This book is a quality guide for students as well as for young researchers since it presents leading innovative contributions on security enhanced applications on various Information Systems.

Print ISBN: 978-1-68251-497-9 | \$150 | 2019 | Hardcover

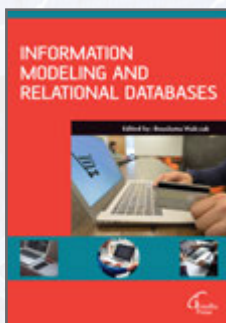


## Foundations of Deductive Databases and Logic Programming

*Editor: Adrian Lily*

The area of deductive databases has matured in recent years, and it now seems appropriate to reject upon what has been achieved and what the future holds. This book covers the up-to-date information in areas such as theoretical foundations, constraints, concurrency and parallelism, deductive databases, language design and implementation, non-monotonic reasoning, and logic programming and the Internet. This book offers an approach to coping with large amounts of intelligent data by combining the techniques of database researchers, who are concerned with the efficient processing of large amounts of data, and of artificial intelligence researchers.

Print ISBN: 978-1-68251-498-6 | \$155 | 2019 | Hardcover



## Information Modeling and Relational Databases

*Editor: Bouslama Walczak*

Moreover, databases are an important step in this process. For this reason, this book deals with object-relational databases implementation as part of informatics systems development. Therefore, this book aims to introduce readers to a number of innovative Information modeling techniques. This book is intended for anyone with a stake in the accuracy and efficacy of databases: systems analysts, information modelers, database designers and administrators, and programmers, and practitioners/managers in data management.

Print ISBN: 978-1-68251-499-3 | \$150 | 2019 | Hardcover



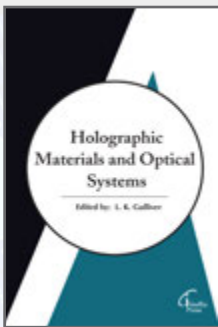


## Advances in Security in Computing and Communications

*Editor: Le Verche K*

The last years have seen an increase in the tension between privacy and accountability. This book reviews these models along with their limitations and review the past techniques used to mitigate these threats. This book will appeal to researchers, engineers, practitioners, graduates, and doctoral students who are working in the field of cryptography, network security, and security and privacy issues in the Internet of Things (IoT). This book investigates the core mechanism in the security of WSNs, which is managing the security keys in the network.

Print ISBN: 978-1-68251-500-6 | \$155 | 2019 | Hardcover



## Holographic Materials and Optical Systems

*Editor: L. K. Gulliver*

Portraying the basic principles of holography and some recent innovative developments in the field, the book focuses on current innovative research achievements in the areas of volume holographic optical elements and systems, development of functionalized holographic recording materials, and applications in holographic imaging and metrology. Innovative holographic devices, as well as application of holograms in security and signal processing are covered.

Print ISBN: 978-1-68251-501-3 | \$155 | 2019 | Hardcover

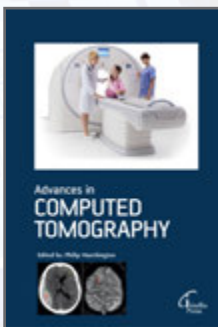


## Current Trends in Image and Video Coding

*Editor: Zivile Christopher*

Image and video standards have played a significant aspect in this deployment. Video coding techniques portrays effective resolutions to show video data in a more compressed and vigorous way so that the storage and transmission of video can be realized in less cost with respect to size, bandwidth and power consumption. Aimed to bring together recent advances and applications of video coding, this book will appeal to researchers, engineers, graduate and post-graduate students, experts in this area, and hopefully also for people who are generally interested in video coding.

Print ISBN: 978-1-68251-502-0 | \$155 | 2019 | Hardcover

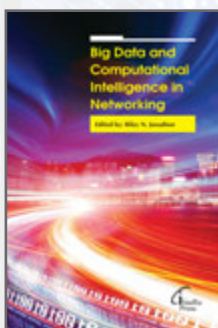


## Advances in Computed Tomography

*Editor: Philip Marchington*

Recent developments in CT technology have led to a widening of its applications on many areas like material testing in engineering, 3D evaluation of teeth, and the vascular and cardiac evaluations of small animals. This book contains studies covering scientific discovery and development by examining the impact that CT has had on the diagnosis, characterization, and management of a sampling of major health challenges, as related to key technical advances in CT and manifested in Radiology. This book will meet the varied requirements of radiography students and practitioners, including comprehensive coverage of the physical principles of CT and its clinical applications.

Print ISBN: 978-1-68251-503-7 | \$150 | 2019 | Hardcover



## Big Data and Computational Intelligence in Networking

*Editor: Riley N. Jonathon*

Big data analytics has shown great potential in optimizing operations, making decisions, spotting business trends, preventing threats, and capitalizing on new sources of revenues in various fields such as manufacturing, healthcare, finance, insurance, and retail. This book presents state-of-the-art solutions to the theoretical and practical challenges stemming from the leverage of big data and its computational intelligence in supporting smart network operation, management, and optimization. The work presented in this book is a combination of theoretical and practical advancements of big data analysis, cloud computing, and their potential applications in scientific computing.

Print ISBN: 978-1-68251-504-4 | \$155 | 2019 | Hardcover





## Operational Amplifiers

*Editor: John Dann*

Operational Amplifiers (Op-amps) are among the most widely used electronic devices today, being used in a vast array of consumer, industrial, and scientific devices. This book gives comprehensive design and characteristics of the gain of the different operational amplifier circuits available. This book is intended for practicing technicians, technologists, engineers, and beginners in the electronics industry.

Print ISBN: 978-1-68251-505-1 | \$155 | 2019 | Hardcover

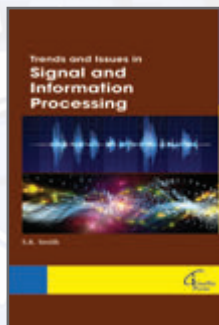


## Wavelet Transform with Real-World Applications

*Editor: P Caleb*

The Wavelet transform is such one efficient and important mathematical tool used to explore a signal in a time-frequency representation to allow analyzing the parts of interest separately. The book covers state of the art advances in wavelet theory and their applications in engineering, physics and technology. The wavelet transforms (WT) and the fractional Fourier transform (FRFT) are powerful tools for many applications in the field of signal processing. This book will be of valued tool for students and researchers from various branches of science and engineering.

Print ISBN: 978-1-68251-506-8 | \$155 | 2019 | Hardcover

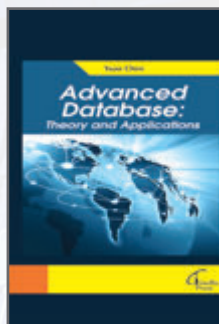


## Trends and Issues in signal and information processing

*Editor: S.K. Smith*

The Signal and Information Processing area concerns the representation, processing, analysis, and communication of the information in all kinds of signals including audio, video, and biological or sensory data. This comprehensive book includes developing novel theoretical and practical approaches to signal modeling, detection/estimation, statistical learning, and the recognition, organization, and understanding of signal content. The book is intended to the latest advancements in signal and information processing.

Print ISBN: 978-1-68251-299-9 | \$155 | 2018 | Hardcover

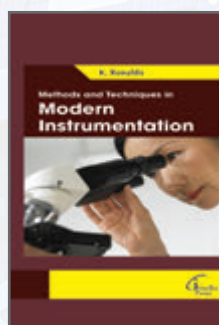


## Advanced Database: Theory and Applications

*Editor: Yuan chen*

This Book discusses recent progress in the area of database theory and application. It aims to present research relevant to database theory and application technology and the applications. Database theory is a relative newcomer to the field of computer science. Early data management systems were based on techniques from several classical areas of computer science, ranging from hardware and operating systems to data structures and programming languages. This book introduces you to the theory of relational databases, focusing on the application of that theory to the design of computer languages that properly embrace it.

Print ISBN: 978-1-68251-300-2 | \$150 | 2018 | Hardcover



## Methods and Techniques in Modern Instrumentation

*Editor: K. Ronaldo*

This Book aims to provide contemporary advancements in instrumentation. The purpose of the work is to provide intensive information on methods of new instrumentation techniques that have been developed and improved in recent years. Its objective is to provide the analyst with a reference manual while providing students with a teaching tool that covers the basics of most instrumental techniques presently used in industry. This Book will appeal to students, practitioners, and academicians, providing comprehensive information and discuss various new issues and developments in different areas of instrumentation.

Print ISBN: 978-1-68251-301-9 | \$160 | 2018 | Hardcover



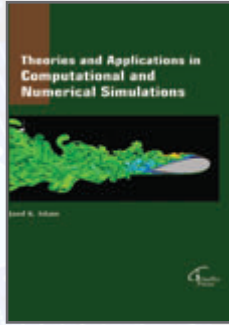


## Computer Networks and Communications

*Editor: Abu Bakar*

Computers are critical for communication and are the centerpiece of information technology. Computer networks provide communication possibilities faster than other facilities. Because of these optimal information and communication possibilities, computer networks may increase the organizational learning rate, which many authors declare as the only fundamental advantage in competition. This book presents the original research studies in all areas of computer networks and communications. It aims to promote the integration of computer networks.

Print ISBN: 978-1-68251-339-2 | \$145 | 2018 | Hardcover

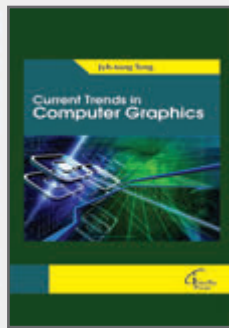


## Theories and Applications in Computational and Numerical Simulations

*Editor: Jaed K. Islam*

This book presents recent research intended to numerical simulations of physical and engineering systems. It offers both new theories and their applications, showing bridge between theoretical investigations and possibility to apply them by engineers of different branches of science. This work will be of interest for researchers, scientists, engineers and graduate students in many disciplines, who make use of mathematical modeling and computer simulation.

Print ISBN: 978-1-68251-340-8 | \$160 | 2018 | Hardcover

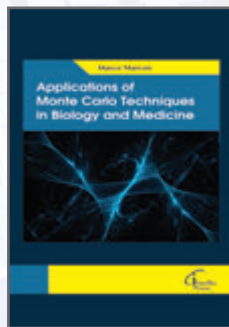


## Current Trends in Computer Graphics

*Editor: Jyh-tong Teng*

Graphics has always been associated with the display of information. Recently there has been great interest in problems of scientific visualization. Although researchers are now using supercomputers to solve formerly intractable problems in fields such as fluid flow and molecular biology, they need new display techniques to interpret the results of analyzing the vast quantities of multidimensional data generated. This book integrate the new algorithms, systems and toolkits for advancing graphics and visualization techniques. This comprehensive issue will provide useful insights for students and researchers in computer graphics.

Print ISBN: 978-1-68251-341-5 | \$155 | 2018 | Hardcover



## Applications of Monte Carlo Techniques in Biology and Medicine

*Editor: Marco Marcon*

Monte Carlo methods are one of the main tools used to study the properties of complex physical, chemical and biological systems. This book brings together specialists in the application areas who understand the specific challenges posed by realistic problems and have developed sophisticated tools to tackle these problems, and mathematicians developing methods for algorithm analysis, abstraction, and optimization. This book will be of beneficial to researchers and practitioners to recent advances and applications of Monte Carlo Simulation (MCS).

Print ISBN: 978-1-68251-342-2 | \$155 | 2018 | Hardcover



## Applications of Monte Carlo Techniques in Science and Engineering

*Editor: Ali H. Hessami*

Monte Carlo techniques have proven very useful for providing optimal design, scheduling, and control of industrial systems, as well offering new approaches to solve classical optimization problems such as the traveling salesman problem, the quadratic assignment problem, and the satisfiability problem. The chapters of this book collectively illustrates how Monte Carlo techniques are used to solve difficult problems or analyze complex systems in various engineering and science domains.

Print ISBN: 978-1-68251-343-9 | \$155 | 2018 | Hardcover





## Recent Advances in Computational Science & Engineering

*Editor: I. N. Rose*

Computational science is a rapidly growing multidisciplinary field that uses advanced computing capabilities to understand and solve complex problems. This work brings together research papers and articles in all aspects of computer science both theoretical and experimental in nature extending support to different areas of current interest in engineering, technology, industries, and business. Besides covering basic issues in every branch of computer science, the book considers frontier issues in soft computing and their applications. This is intended to recent development in any area of computer science and engineering together with teaching and research methodologies.

Print ISBN: 978-1-68251-370-5 | \$155 | 2018 | Hardcover



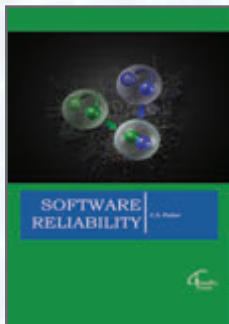


## Fundamentals of Electronic Data Processing

*Editor: W.R. Roland*

Electronic data processing (EDP), an infrequently used term for what is today usually called "IS" (information services or systems) or "MIS" (management information services or systems), is the processing of data by a computer and its programs in an environment involving electronic communication. EDP evolved from "DP" (data processing), a term that was created when most computing input was physically put into the computer in punched card form and output as punched cards or paper reports. This book presents a comprehensive overview of electronic data processing.

Print ISBN: 978-1-68251-234-0 | \$150 | 2017 | Hardcover

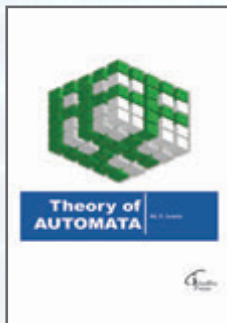


## Software Reliability

*Editor: C.S. Potter*

Software reliability is the probability of failurefree software operation for a specified period of time in a specified environment. Software reliability is also an important factor affecting system reliability. It differs from hardware reliability in that it reflects the design perfection, rather than manufacturing perfection. This book shows how to develop tests that ensure the reliability of software systems.

Print ISBN: 978-1-68251-235-7 | \$150 | 2017 | Hardcover



## Theory of Automata

*Editor: M. F. Lewis*

Automata theory is the study of abstract machines and automata, as well as the computational problems that can be solved using them. It is a theory in theoretical computer science, under discrete mathematics. This book covers formal computer languages and computation.

Print ISBN: 978-1-68251-236-4 | \$150 | 2017 | Hardcover

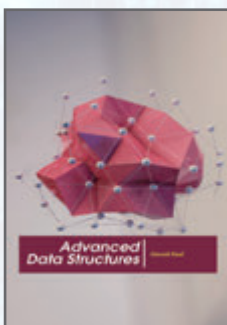


## Principles of Compiler Design

*Editor: Albert Moore*

Compiler design principles provide an in-depth view of translation and optimization process. Compiler design covers basic translation mechanism and error detection and recovery. It includes lexical, syntax, and semantic analysis as front end, and code generation and optimization as back-end. This book deals with the optimization phase of compilers. In this phase, programs are transformed in order to increase their efficiency. To preserve the semantics of the programs in these transformations, the compiler has to meet the associated applicability conditions. These are checked using static analysis of the programs.

Print ISBN: 978-1-68251-237-1 | \$150 | 2017 | Hardcover



## Advanced Data Structures

*Editor: Daved Paul*

Data structures are the programmatic way of storing data so that data can be used efficiently. Almost every enterprise application uses various types of data structures in one or other way. This book examines ideas, analysis, and implementation details of data structures as a specialized topic in applied algorithms.

Print ISBN: 978-1-68251-238-8 | \$150 | 2017 | Hardcover





## Advanced Networking and Security

*Editor: D. Alwyn*

Network security is the process of taking physical and software preventative measures to protect the underlying networking infrastructure from unauthorized access, misuse, malfunction, modification, destruction, or improper disclosure, thereby creating a secure platform for computers, users and programs to perform their permitted critical functions within a secure environment. This book introduces the advanced techniques which secure important data and also explains how to create and deploy an effective security policy, manage and assess risk, and perform audits.

Print ISBN: 978-1-68251-239-5 | \$150 | 2017 | Hardcover





## Ecotoxicology

*Contributors: Valentina Marchesano, Alfredo Ambrosone et al.*

Ecotoxicology is the study of the effects of toxic chemicals on biological organisms, especially at the population, community, ecosystem level. Ecotoxicology is a multidisciplinary field, which integrates toxicology and ecology. The ultimate goal of this methodology is to be able to forecast the effects of pollution so that the most efficient and effective action to prevent or remediate any detrimental effect can be identified. Major issues addressed by ecotoxicological studies include chemical substance transport, fate, and effects within ecological systems. The book reveals mechanisms and processes whereby chemicals exert their effects on ecosystems, and examines the impact caused at the population or community level.

Print ISBN: 9781682510599 | \$170 | Pub Year: 2016 | Hardcover

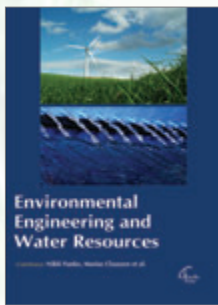


## Urban Planning: Theory & Practice

*Contributors: Aysel Uslu and Nasim Shakouri et al.*

Urban planning is a technical and political process concerned with the use of land, protection and use of the environment, public welfare, and the design of the urban environment. It ensures the orderly development of settlements and satellite communities which commute into and out of urban areas or share resources with it. This book covers the factors into consideration when choosing the locations for buildings, and sets up appropriate zones accordingly.

Print ISBN: 9781682510810 | \$170 | Pub Year: 2016 | Hardcover



## Environmental Engineering and Water Resources

*Contributors: Nikki Funke, Marius Claassen et al.*

Industrial Chemistry is the branch of chemistry which applies physical and chemical processes towards the transformation of raw materials into products that are of benefit to humanity. The book introduces the general overview of new trends in designing industrial chemical processes which are environmentally friendly and economically feasible.

Print ISBN: 9781682510780 | \$170 | Pub Year: 2016 | Hardcover



## Ocean Sciences: Introduction

*Contributors: Marco Marcelli, Andrea Pannocchi et al.*

Ocean science is the study of the global marine environment, from the icy wastes of the polar seas to the tranquil lagoons of coral islands: from the still blue depths of the Pacific to the busy and polluted waterway of an urban estuary. It combines direct observation of this environment with a systematic search for understanding of the processes that control it. This book covers a wide range of topics, including marine organisms and ecosystem dynamics; ocean currents, waves, and geophysical fluid dynamics; plate tectonics and the geology of the sea floor.

Print ISBN: 9781682510827 | \$170 | Pub Year: 2016 | Hardcover



## Geosciences: Remote Sensing Applications

*Contributors: Wei Chen, Fusheng Wang et al.*

Geoscience is an all-encompassing term that refers to the fields of science dealing with planet Earth. Remote sensing is the acquisition of information about an object or phenomenon without making physical contact with the object, it is the sub-field of geography. This book covers latest and futuristic developments in remote sensing novel theory and applications by numerous scholars, researchers and experts.

Print ISBN: 9781682510858 | \$170 | Pub Year: 2016 | Hardcover



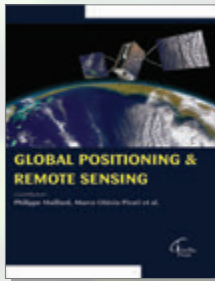


### Advances In Remote Sensing & Plate Tectonics

*Contributors: Hooman Latifi et al.*

Plate tectonics is a scientific theory that describes the large-scale motion of Earth's lithosphere, which is the rigid outermost shell of a planet, is broken up into tectonic plates. These are composed of oceanic lithosphere and thicker continental lithosphere, each topped by its own kind of crust. This book intends to show how remote sensing impacts other areas of science, technology, and human activity, by displaying a selected number of high quality contributions dealing with different remote sensing applications.

Print ISBN: 9781682510896 | \$180 | Pub Year: 2016 | Hardcover

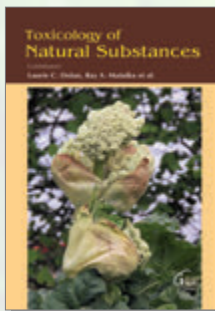


### Global Positioning & Remote Sensing

*Contributors: Philippe Maillard, Marco Otávio Pivari et al.*

Remote Sensing is collecting and interpreting information on targets without being in physical contact with the objects. It also replaces costly and slow data collection on the ground, ensuring in the process that areas or objects are not disturbed. This book introduces the space-based navigation system that provides location and time information in all weather conditions and provide prompt access to the latest innovations in research and technology in global remote sensing fields.

Print ISBN: 9781682510872 | \$170 | Pub Year: 2016 | Hardcover



### Toxicology of Natural Substances

*Contributors: Laurie C. Dolan, Ray A. Matulka et al.*

Toxicology concerned the harmful effects of chemical, biological and physical agents in biological systems that establishes the extent of damage in living organisms. This book gives to an easily accessible resource for vital toxicological information on foods, plants, and animals in key areas in the natural environment. It is a unique resource that provides to practitioners with a wide-ranging, accessible overview of the discipline.

Print ISBN: 9781682511206 | \$170 | Pub Year: 2016 | Hardcover

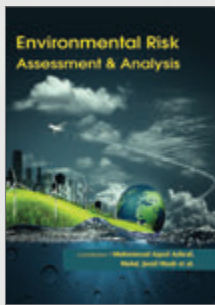


### Advances in Geotechniques & Hydrology

*Contributors: Shailee Jain, Srinivasulu Ale et al.*

Geotechniques is a field that aims to apply knowledge of earth sciences to engineering problems involving the Earth's crust, soil, stones, and related materials. It embraces the fields of soil mechanics and rock mechanics, and many of the aspects of geology, geophysics, hydrology, and other related sciences. This book concerns with applying knowledge of geotechniques to specific problems, which usually involve construction.

Print ISBN: 9781682510889 | \$180 | Pub Year: 2016 | Hardcover



### Environmental Risk Assessment & Analysis

*Contributors: Muhammad Aqeel Ashraf, Mohd. Jamil Maah et al.*

Risk assessment is the determination of quantitative or qualitative estimate of risk related to a concrete situation and a recognized threat. Whereas the risk analysis is a broad term that is used in a number of different settings and evaluation of the potential risk inherent in an upcoming transaction and the identification of several different options in how to proceed. This book includes a complete overview of environmental risk and covers environmental risk-related topics and also addresses the environmental risk calculations that involve both discrete and continuous probability distributions.

Print ISBN: 9781682511442 | \$170 | Pub Year: 2016 | Hardcover



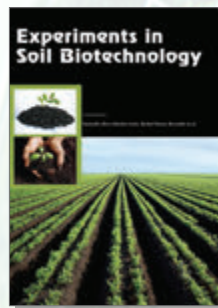


## Rainwater Harvesting & Soil Water Conservation Technique

*Contributors: Liliana Lizárraga-Mendiola, Gabriela Vázquez-Rodríguez et al.*

Rainwater harvesting is the accumulation and deposition of rainwater for reuse on-site, rather than allowing it to run off. Soil water conservation is one where farmers and ranchers improve soil resources and productivity, protect or improve water quality, and efficiently use water at renewable levels. This paper highlights the successful interventions of improved indigenous rainwater harvesting/soil water conservation technologies such as tassa, stone rows and half-moon, and their contributions to enhancing food security and alleviating poverty.

Print ISBN: 9781682511459 | \$170 | Pub Year: 2016 | Hardcover

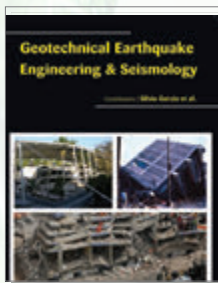


## Experiments in Soil Biotechnology

*Contributors: Danyelle Alves Martins Assis, Rachel Passos Rezende et al.*

Soil biotechnology is the study and manipulation of soil micro-organisms and their metabolic processes to optimize crop productivity. It is a system for water renovation which makes use of a formulated media with culture of soil micro and macro-organisms to process water and wastewater. This book deals the issues concerned to the soil fertility, soil health, plant growth and soil biotechnology in relation to microbial activities.

Print ISBN: 9781682511619 | \$170 | Pub Year: 2016 | Hardcover



## Geotechnical Earthquake Engineering & Seismology

*Contributors: Silvia Garcia et al.*

Earthquake Engineering can be defined as the branch of engineering devoted to mitigating earthquake hazards, it covers the investigation and solution of the problems created by damaging earthquakes, and consequently the work involved in the practical application of these solutions. The main aim of this book is a collection of data which is useful in understanding the state-of-art technology and its application to new topics.

Print ISBN: 9781682511473 | \$170 | Pub Year: 2016 | Hardcover

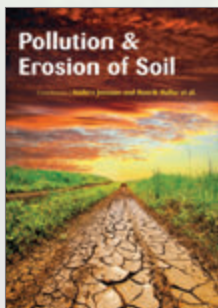


## Soil Mechanics & Foundation Engineering

*Contributors: Mohd Ahmed, Mahmoud H. Mohamed et al.*

Soil mechanics is used to analyze the deformations of and flow of fluids within natural and manmade structures that are supported on or made of soil, or structures that are buried in soils. This book discusses about the fundamental principle and foundation application of soil mechanics is needed to predict the behavior and performance of soil as a construction materials or as a supporting medium for engineering structure.

Print ISBN: 9781682510797 | \$170 | Pub Year: 2016 | Hardcover

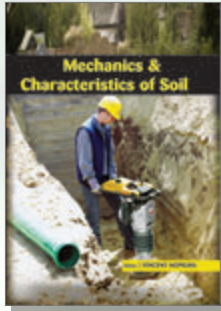


## Pollution & Erosion of Soil

*Contributors: Anders Jonsson and Henrik Haller et al.*

Soil pollution is caused by the presence of xenobiotic chemicals or other alteration in the natural soil environment. It also concern over soil contamination stems primarily from health risks, from direct contact with the contaminated soil, vapors from the contaminants, and from secondary contamination of water supplies within and underlying the soil. This book discusses the erosion and pollution of soil, the harmful effects of these processes, and ways of preventing them.

Print ISBN: 9781682511602 | \$170 | Pub Year: 2016 | Hardcover



## Mechanics & Characteristics of Soil

*Contributors: Vincent Hopkins et al.*

Soil mechanics is a branch of engineering mechanics that describes the behavior of soils and differs from fluid mechanics and solid mechanics in the sense that soils consist of a heterogeneous mixture of fluids and particles but soil may also contain organic solids, liquids, and gasses and other matter. This book involves the study of soil mechanics formation by weathering and its transportation characteristics by wind and water. Whereas the formation process determines many of the physical properties of soil, such as structure, composition and relative density.

Print ISBN: 9781682510803 | \$170 | Pub Year: 2016 | Hardcover



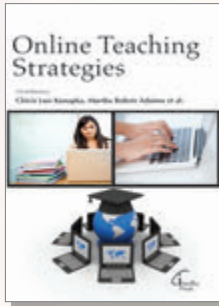


## Psychology And Social Issues

*Contributors: Neil Matthews et al.*

Social psychology is the scientific study of how people's thoughts, feelings, and behaviors are influenced by the actual, imagined, or implied presence of others. The statement that others' presence may be imagined or implied suggests that we are prone to social influence even when no other people are present, such as when watching television, or following internalized cultural norms. Social psychology is a discipline that had traditionally bridged the gap between psychology and sociology. This book focuses on the psychological aspects of important social and policy issues.

Print ISBN: 9781682510360 | \$160 | Pub Year: 2016 | Hardcover

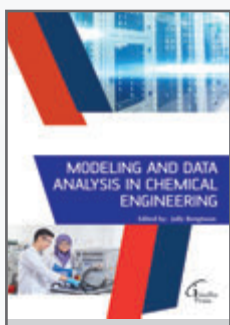


## Online Teaching Strategies

*Contributors: Clóvis Luís Konopka, Martha Bohrer Adaime et al.*

Online teaching is increasingly common at many types of higher education institutions, ranging from hybrid courses that offer a combination of in-person and online instruction, to fully online experiences and distance learning. This book offers an understanding of how cognition and learning theory applies to an online learning environment. This book is intended as a practical introduction for beginning or otherwise, who want useful ideas and techniques that will help them teach more effectively in the online.

Print ISBN: 9781682511312 | \$160 | Pub Year: 2016 | Hardcover

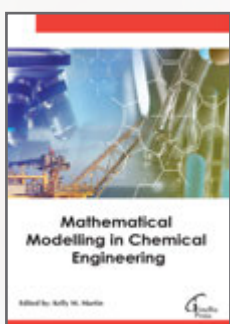


## Modeling and Data Analysis in Chemical Engineering

*Editor: Jolly Bengtsson*

Technology alone is insufficient to meet the challenges at hand; ecological, social and economic considerations must be incorporated through a multi-faceted and multi-disciplinary approach. This work describes theoretical and practical framework and relates it to the empirical models we use in the data analysis. This book will appeal Chemical Engineers, Manufacturing Engineers, and Industrial Engineers as well as an assisting tool for engineering and applied science students to incorporate empirical investigation into such design processes.

Print ISBN: 978-1-68251-507-5 | \$155 | 2019 | Hardcover

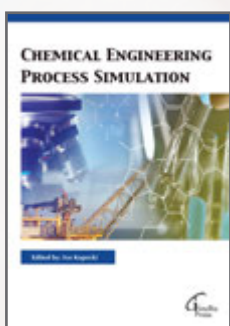


## Mathematical Modelling in Chemical Engineering

*Editor: Kelly M. Martin*

This book presents the key areas of chemical engineering, their mathematical foundations, and corresponding modeling techniques valuable for chemical engineers, researchers as well as practitioners. The book provides state of the art information to mathematical modeling for a range of chemical engineering applications, covering model formulation, simplification and validation. This book demonstrates applications and case studies performed by experts for professionals and students in the field of chemical engineering and other industries in which mathematical modelling plays a role.

Print ISBN: 978-1-68251-508-2 | \$155 | 2019 | Hardcover

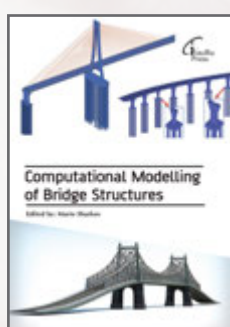


## Chemical Engineering Process Simulation

*Editor: Ivo Kopecki*

Providing a rigorous treatment of the fundamental concepts and techniques involved in process modeling and simulation; this comprehensive work shows how to design and develop innovative, optimal and sustainable chemical processes by applying the principles of process systems engineering, leading to integrated sustainable processes with 'green' attributes. Chemical Engineering Process Simulation is ideal for students, early career researchers, and practitioners, as it guides you through chemical processes and unit operations using the main simulation softwares that are used in the industrial sector.

Print ISBN: 978-1-68251-509-9 | \$155 | 2019 | Hardcover

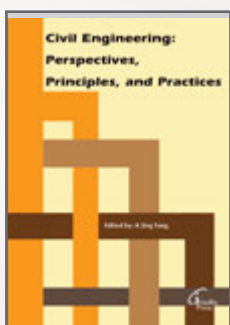


## Computational Modelling of Bridge Structures

*Editor: Mario Sharkov*

The purpose of this book is to present a state-of-the art review of the computational research performed in the field of earthquake engineering of bridges during the past decade. The focus of the book is on bridge structures and computational modeling as opposed to bridge components. This valuable reference can be very appropriate and useful for all professors, researchers, engineers, practicing professionals, trainee practitioners, students and others who are concerned in the bridge projects.

Print ISBN: 978-1-68251-510-5 | \$160 | 2019 | Hardcover



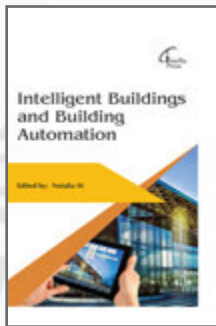
## Civil Engineering: Perspectives, Principles, and Practices

*Editor: K Jing Yang*

Over the last years a number of researches have been done dealing with the achievements in these areas of fundamental sciences and their application in civil engineering as well as in building and construction. This book discusses the importance of civil engineering in the history of civilization, explores problems civil engineers face each day, and outlines some modern accomplishments in the field. A useful reference tool for students, professionals, and researchers working on sustainability related problems in civil engineering.

Print ISBN: 978-1-68251-511-2 | \$155 | 2019 | Hardcover



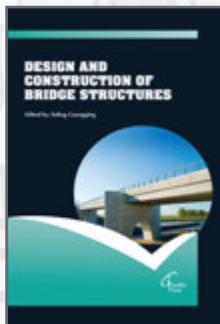


## Intelligent Buildings and Building Automation

*Editor: Natalia M*

A plethora of intelligent components and products that have been introduced and made available in the building industry over the last few years, are a testimony to the same. Buildings of the future have to take into account the challenges and the opportunities brought about by technological, environmental and societal changes. The emphasis of this book lies in the analysis of intelligent buildings against the principles of total sustainability to reveal their benefits and limitations. Smart applications of the Internet of Things are improving the performance of buildings, reducing energy demand. The book covers the costs and benefits of smart buildings, and the basic design foundations, technology systems, and management systems encompassed within a smart building.

Print ISBN: 978-1-68251-512-9 | \$155 | 2019 | Hardcover

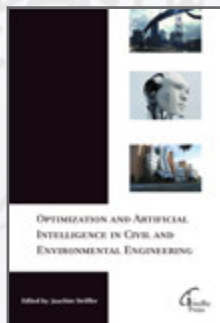


## Design and Construction of Bridge Structures

*Editor: Yuling Guangqing*

Today, long span suspension bridges, cable stayed bridges, truss girder and composite bridges figure among the high points of bridge construction. This book focuses on current and future trends in bridge design, construction and maintenance, in conjunction with a team of world-renowned bridge engineers, practitioners and international organisations. This book will be of interest to geotechnical, bridge construction, and maintenance engineers and others interested in design, construction, and maintenance of embankment approaches to bridge abutments.

Print ISBN: 978-1-68251-513-6 | \$155 | 2019 | Hardcover



## Optimization and Artificial Intelligence in Civil and Environmental Engineering

*Editor: Joachim Striffler*

Dealing with practical applications in the civil and environmental engineering, this book deals the methods as well as problems with emphasis on applications to Civil Engineering topics. This book summarizes recently developed methods and theories in the developing direction for applications of artificial intelligence in civil engineering, including evolutionary computation, neural networks, fuzzy systems, expert system, reasoning, classification, and learning, as well as others like chaos theory, cuckoo search, firefly algorithm, knowledge-based engineering, and simulated annealing.

Print ISBN: 978-1-68251-514-3 | \$155 | 2019 | Hardcover

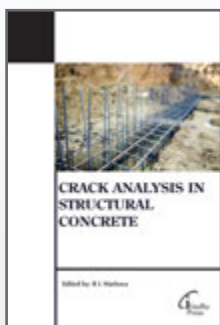


## Risk Management for Design and Construction

*Editor: Thiam Arnold*

Construction projects are facing a number of risks which have negative effects on project objects such as time, cost and quality. Risk management is an important field of construction industry and has gained more importance internationally due to the latest researches carried out on a large scale. This book tends towards reviewing the existing literature on construction project risk managements. This guide for construction managers, project managers and quantity surveyors as well as for students and practitioners shows how the risk management process improves decision-making.

Print ISBN: 978-1-68251-515-0 | \$155 | 2019 | Hardcover



## Crack Analysis in Structural Concrete

*Editor: R L Markova*

A comprehensive information guide on fast-developing field of structural analysis in concrete; this book discusses causes of concrete cracking, including tensile strength of concrete, temperature, shrinkage and creep effects. This book also investigates the application of distributed optical fiber strain sensors to civil engineering structures, because no other tool can satisfactorily detect the location of the unpredictable phenomenon. This book will be of valued to professional civil and structural engineers as well as researchers in civil and structural engineering and related disciplines.

Print ISBN: 978-1-68251-516-7 | \$155 | 2019 | Hardcover



## Earthquake Engineering for Structural Design

*Editor: Xiao-Qi Liu*

This book is intended to various aspects of earthquake research and analysis, from theoretical advances to practical applications. It covers selected topics written by researchers and experts in the field of earthquake engineering. The book portrays seismic-resistance design of masonry and reinforced concrete structures to be constructed as well as safety assessment, strengthening and rehabilitation of existing structures against earthquake loads. This book will be of valuable to graduate students, researchers and practicing structural engineers.

Print ISBN: 978-1-68251-517-4 | \$150 | 2019 | Hardcover



## Earthquake Prediction and Risk Reduction

*Editor: Macon Murphy*

A spate of earthquakes in the recent past, causing extensive damage has heightened the sensitivity of engineers and planners to the looming seismic risk in densely populated cities. This work presents issues, models, and methodologies arising out of the problems of predicting earthquakes and forecasting earthquake risk. The emphasis is on statistical methods which attempt to quantify the probability of an earthquake occurring within specified time, space, and magnitude windows. This book will appeal to graduate students, researchers and practicing structural engineers.

Print ISBN: 978-1-68251-518-1 | \$155 | 2019 | Hardcover

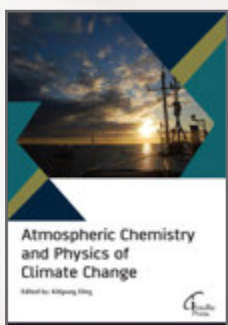


## Advanced Soil Dynamics and Earthquake Engineering

*Editor: Hucheng Huang*

This book covers studies intended to encourage and enhance the role of mechanics and other disciplines as they relate to earthquake engineering by providing opportunities all over the world that provides engineers, scientific researchers, construction and design specialists with the latest achievements in soil and rock mechanics theory, experimental investigations, geotechnical and foundation engineering problems and innovative solutions, design and construction practice in regions with regular and extreme soil conditions.

Print ISBN: 978-1-68251-519-8 | \$155 | 2019 | Hardcover



## Atmospheric Chemistry and Physics of Climate Change

*Editor: Kitipong Ding*

Climate change has been recognized as the foremost environmental problem of the twenty-first century and has become a subject of considerable debate. It is predicted to lead to adverse, irreversible impacts oil earth and the ecosystem as a whole. This book highlights the need to plan and implement adaptation in the context of sustainable development and integrate adaptation into policy at all levels. This book will serve as valuable guide to undergraduate and graduate students and professionals working in the science and policy of pollution, climate change and air quality a broad and up-to-date account of our understanding.

Print ISBN: 978-1-68251-520-4 | \$150 | 2019 | Hardcover



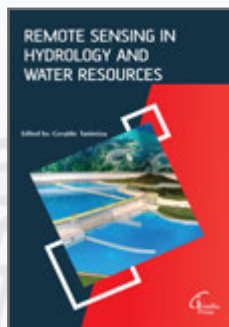
## Atmospheric Aerosol Properties: Formation, Processes and Impacts

*Editor: Jonathan Riccardo*

Research is being conducted in a variety of fields to better understand all relevant processes governing Earth's climate, and to assess the relative roles of anthropogenic and biogenic emissions into the atmosphere. This book provides innovative insights into the compounds participating both in the initial formation and subsequent growth of atmospheric new aerosol particles. It will hopefully prove an important step in understanding atmospheric gas-to-particle conversion, which, by influencing cloud properties, can have important climate impacts.

Print ISBN: 978-1-68251-521-1 | \$150 | 2019 | Hardcover



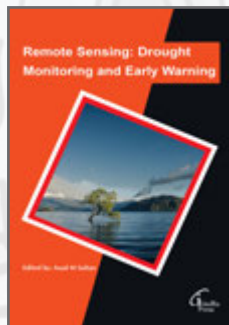


## Remote Sensing in Hydrology and Water Resources

*Editor: Geraldo Tanimizu*

This book brings together state of the art research and reviews showing how space-based observations, combined with hydrological modeling, have considerably improved our knowledge of the continental water cycle and its sensitivity to climate change. This book covers some of the remote sensing-driven applied research and futuristic developments in remote sensing novel theory and applications by numerous scholars, researchers and experts.

Print ISBN: 978-1-68251-522-8 | \$150 | 2019 | Hardcover



## Remote Sensing: Drought Monitoring and Early Warning

*Editor: Asad M Sultan*

In recent decades, various kinds of remote sensing-based drought indexes have been proposed and widely used in the field of drought monitoring. In the past few decades, satellite-based remote sensing has provided relatively high spatial resolution and high temporal resolution. Remotely sensed imagery provides spatial continuous spectral measures across large areas that reflect both atmospheric and land surface characteristics. It aims to give a retrospective insight into the spatio-temporal evolution of agriculturally relevant droughts in consideration of growing seasons and agricultural areas.

Print ISBN: 978-1-68251-523-5 | \$155 | 2019 | Hardcover

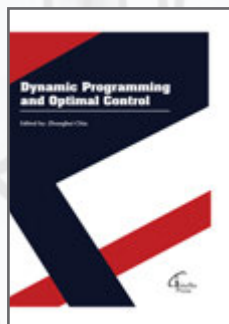


## Electric Power Systems: Modelling and Control Applications

*Editor: Jinglin Gai*

This book presents perspectives of electric power system analysis, operation and control. Models of power system components such as transmission lines, transformers, static loads and synchronous generators are described in power system analysis. This book will be of interest for those involved in the research and those involved in the practical applications of new ideas and developments and a comprehensive reference source for all involved in the power industry.

Print ISBN: 978-1-68251-524-2 | \$150 | 2019 | Hardcover

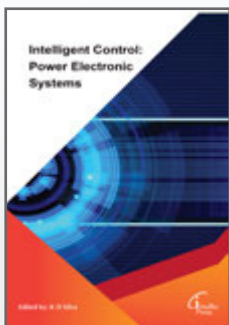


## Dynamic Programming and Optimal Control

*Editor: Zhonghui Chia*

In the real world, we often encounter many optimal decision-making problems, also known as optimal control problems. This book covers state of the art in innovative developments in adaptive dynamic programming (ADP), including theoretical and practical aspects of computing methods for mathematical modelling of nonlinear systems. A number of computing techniques are considered. Students and Researchers dealing with intelligent control methods and practitioners looking to utilize them in the chemical and power industries will find much to interest them in this in-depth treatment of an advanced approach to control.

Print ISBN: 978-1-68251-525-9 | \$150 | 2019 | Hardcover

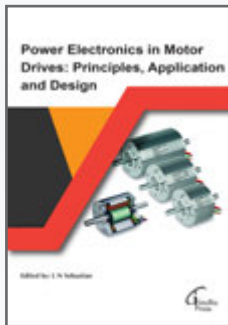


## Intelligent Control: Power Electronic Systems

*Editor: K D Silva*

Advent of advanced power electronic converters and powerful digital signal processors, however, has made possible the development of high performance, adjustable speed AC motor drives. As you know, power electronics and motor drive technology is very complex and multidisciplinary, and it has gone through a dynamic evolution in recent years. Understanding of the basic theoretical and practical underpinnings of advanced control to illustrate their use in power converters, this book presents the application of different predictive control methods to power electronics and drives.

Print ISBN: 978-1-68251-526-6 | \$155 | 2019 | Hardcover

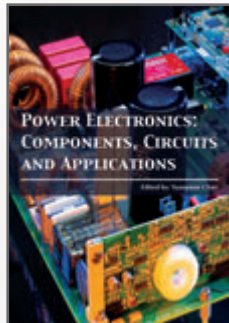


## Power Electronics in Motor Drives: Principles, Application and Design

*Editor: L N Sebastian*

High-speed motors and drives can lead to a high power density and compact design, which are beneficial to a wide range of applications, including aerospace, transportation, and hand-held tools. This book provides an overview of state-of-the-art technologies and anticipated developments in the area of power electronic drives, controls, and electric generators for large multi-megawatt wind turbine systems. The book is aimed at readers from a range of disciplines, introductory material on motors and power electronics as well trends and development are also provided.

Print ISBN: 978-1-68251-527-3 | \$155 | 2019 | Hardcover

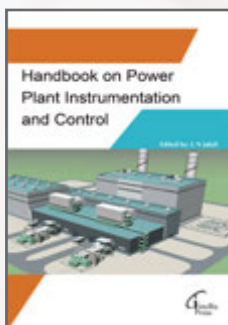


## Power Electronics: Components, Circuits and Applications

*Editor: Yuanyuan Chan*

Applications of power electronics include industrial uses, commercial uses, residential purposes, electric vehicles, aerospace and space technologies. Covering state of the art information concerned with detailed analysis and design of converters, inverters and power control circuits using solid-state devices, this book will appeal to power electronic circuit designers, researchers, and material science engineers involved with power electronic components. The book concerns the important considerations necessary in the choice of the optimum magnetic component for power electronic applications.

Print ISBN: 978-1-68251-528-0 | \$150 | 2019 | Hardcover

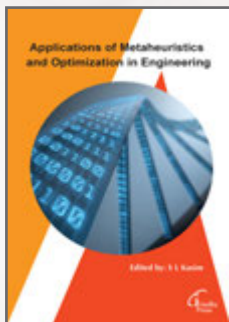


## Handbook on Power Plant Instrumentation and Control

*Editor: L N Jalali*

Today's state-of-art control systems are highly automated, and in many installations, allow one operator in a central control room to manage the entire production. This book will give an understanding of power plant systems, components and their applications, including analysis of plant performance, energy efficiency, combustion, and heat transfer, and environmental aspects of combustion residues. A suitable tool for both undergraduate and researchers and of course for practicing power plant engineers.

Print ISBN: 978-1-68251-529-7 | \$165 | 2019 | Hardcover

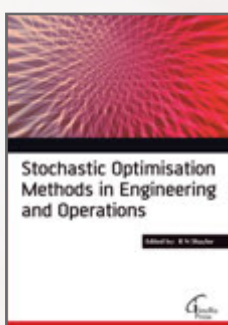


## Applications of Metaheuristics and Optimization in Engineering

*Editor: S L Kasim*

This book focuses on the principles and the state-of-the-art of metaheuristic methods for engineering optimization. This book shows how metaheuristics can be used to solve complex problems of engineering. The book is intended to present the main metaheuristics and approximate and stochastic methods for optimization of complex systems in Engineering Sciences. With its wide-range of everyday problems and solutions, this book can serve as a reference for researchers and engineers in metaheuristics, optimization in civil engineering and computational intelligence.

Print ISBN: 978-1-68251-530-3 | \$155 | 2019 | Hardcover



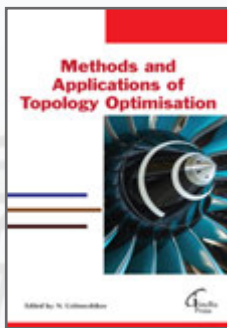
## Stochastic Optimisation Methods in Engineering and Operations

*Editor: R N Shaylor*

Stochastic optimization algorithms have been growing rapidly in popularity over the last decade or two, with a number of methods now becoming "industry standard" approaches for solving challenging optimization problems. This book examines optimization problems that in practice involve random model parameters. It details the computation of robust optimal solutions, i.e., optimal solutions that are insensitive with respect to random parameter variations, where appropriate deterministic substitute problems are needed.

Print ISBN: 978-1-68251-531-0 | \$155 | 2019 | Hardcover



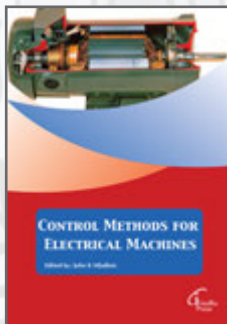


## Methods and Applications of Topology Optimisation

*Editor: N. Ustinovshikov*

In recent years' topology optimization has been more and more often used in the process of design. This book presents latest developments and applications in this increasingly popular & maturing optimization approach for engineers and architects; contributed by leading researchers in the field who have been working in the area. The method presented in this book can be considered as one of the most effective approaches to the optimization of layout and material design. This book will appeal to graduate students, researchers and engineers, in detailing how to use topology optimization methods to improve product design.

Print ISBN: 978-1-68251-532-7 | \$155 | 2019 | Hardcover



## Control Methods for Electrical Machines

*Editor: John K Mladinic*

Motor control systems make use of a wide variety of control devices. The motor control devices range from simple pushbutton switches to more complex solid-state sensors. Examining existing and emerging electrical drive technologies, this book presents various computationally efficient component- and system-level design optimization methods for advanced electrical machines and drive systems. Illustrating modeling techniques and software simulation of the switched reluctance machine (SRM) machine models with controllers for efficient operation; the book covers an exhaustive state-of-the-art review valuable for students and researchers.

Print ISBN: 978-1-68251-533-4 | \$155 | 2019 | Hardcover

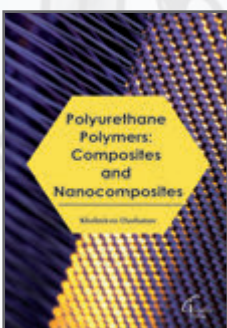


## Materials and Surface Engineering: Research and Development

*Editor: Marcelo Kleperis*

This book deals with the principles and techniques of materials surface treatment and protection bringing together theory and innovative research trends in the field. The various surface treatments generally used in engineering practice and presented in this book. Protection of materials under different conditions in various environments remains the important issue for science and technology. A valuable reference tool for researchers, engineers, scientists & managers working in the field of surface engineering, materials science and engineering, chemical engineering, mechanical engineering and other related fields.

Print ISBN: 978-1-68251-534-1 | \$155 | 2019 | Hardcover

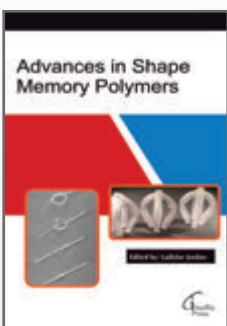


## Polyurethane Polymers: Composites and Nanocomposites

*Editor: Kholmirzo Dushanov*

Recently, polyurethanes (PUs) have attracted attention as promising biodegradable polymer candidates for various applications. Blending has been widely and effectively used to modify or control the properties of polymer by appropriately compounding miscible polymers. The book provides an elaborate coverage of the chemistry of polyurethane, its synthesis, and properties. Discussing current research and future research needs in the area, this book will be of valuable to students and researchers.

Print ISBN: 978-1-68251-535-8 | \$155 | 2019 | Hardcover

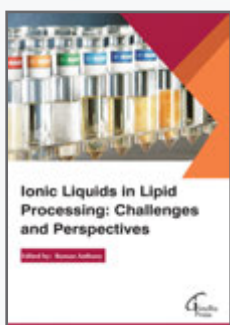


## Advances in Shape Memory Polymers

*Editor: Ladislav Jordan*

Provide insights into the material design and shape memory mechanism, elucidate and evaluate their properties and performance, and point out opportunities and applications of SMPs, this book emphasizes on the raw materials required for the synthesis of shape memory polyurethane (SMPU), the principle of shape memory function, the design of protocol of SMPU, and their applications with future directions.

Print ISBN: 978-1-68251-536-5 | \$155 | 2019 | Hardcover



## Ionic Liquids in Lipid Processing: Challenges and Perspectives

*Editor: Roman Anthony*

Concerns with ionic liquids are one of the most interesting and rapidly developing areas in modern physical chemistry, materials science, technologies, and engineering. The book covers the state-of-the-art applications of ionic liquids in lipid processing and relevant areas from a variety of perspectives. Increasing attention has also been paid to the use of ionic liquids in the research fields of biological aspects and natural resources. Serves as a reference guide for those interested in state-of-the-art research on the science and technology of ionic liquids (ILs), particularly in relation to lipids processing and analysis.

Print ISBN: 978-1-68251-537-2 | \$155 | 2019 | Hardcover

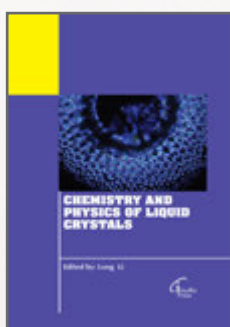


## Luminescent Materials and Applications

*Editor: J K Robert*

The varied aspects of luminescence and the complex processes involved in the origin of light emission, offer interesting challenges for researchers in this field. This book highlights some new advances in the field of luminescent materials, from fundamentals aspects through to application and future directions for the field. Applications of fluorescence in a variety of fields, and description of phosphors have also been discussed in detail in this compendium; a comprehensive reference tool of information to students, practitioners and researchers.

Print ISBN: 978-1-68251-538-9 | \$155 | 2019 | Hardcover

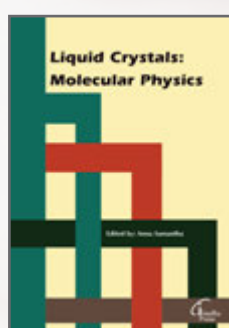


## Chemistry and Physics of Liquid Crystals

*Editor: Long Li*

Liquid crystal technology is a subject of many advanced areas of science and engineering. This book covers state of the art research and reviews focusing on liquid crystals, their structure and properties. Nowadays, due to this extensive research effort, the conception and fabrication of such photonic structures have gained a complete maturity leading to the realization of the first real applications. This book will be of interest for physicists, chemists, and engineers working in academia or industry, as well as graduate students specializing in liquid crystal technology.

Print ISBN: 978-1-68251-539-6 | \$155 | 2019 | Hardcover



## Liquid Crystals: Molecular Physics

*Editor: Anna Samantha*

Research on liquid crystal has been involved in chemistry, physics, Biology, electric and electronic engineering and many other fields. This book is intended to portray on various aspects of research and development that liquid crystal mediums have come across in recent years. Therefore, it is expected that this book will magnetize a wide variety of research workers from crystallographers, molecular physicists, and biophysicists to structural chemists, organic chemists, polymer chemists, and drug industry, and so forth.

Print ISBN: 978-1-68251-540-2 | \$155 | 2019 | Hardcover



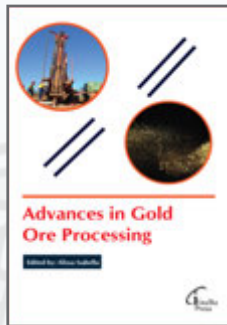
## Self-Healing Polymers and Polymer Composites: Recent Advances

*Editor: L N Parker*

This book presents state of the art reviews on various self-healing approaches that have been developed and it clearly demonstrated the technical aspects involved in bio mimicking the self-healing behavior in polymer composite materials. The development of self-healing materials is now being considered for real engineering applications. Focusing on smart self-healing polymers and composites as one of the most popular, challenging, and promising areas of research, this book will serve as a comprehensive guide for students, researchers and specialists.

Print ISBN: 978-1-68251-541-9 | \$155 | 2019 | Hardcover





## Advances in Gold Ore Processing

*Editor: Alissa Isabella*

Over the years, gold recovery has been the key issue in wide range of studies as a result of its high demand and value. This book covers all the methodological aspects appropriate to current gold ore processing, proposing a practical perspective that is vital to the successful and responsible development, operation, and closure of any gold ore processing operation. The book explains how the principles of risk assessment, risk management and risk communication contribute to the safe use of cyanide in gold recovery.

Print ISBN: 978-1-68251-542-6 | \$155 | 2019 | Hardcover



## Simulation and Optimisation of Heat Exchangers

*Editor: Suzanne Pienaar*

The need for high-performance heat-dissipating devices is highly needed in today's rapidly changing power device and electronics markets. Thus, the need for automated design processes carried out with the use of computer as tools has never been so imperative. The book addresses several important issues, such as conceptions, design, operations, fouling and cleaning of heat exchangers. This book will appeal to researchers, postgraduate students, academics, and engineers working in the field of heat exchangers research and development.

Print ISBN: 978-1-68251-543-3 | \$155 | 2019 | Hardcover

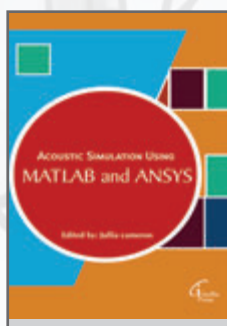


## Heat and Mass Transfer: Modeling and Simulation

*Editor: Zhenzhen Xing*

In recent times, numerical modeling and simulation techniques have been increasingly applied to the problems of heat transfer. Modeling and simulation of heat transfer phenomena as developed and applied is presented in various engineering applications. Knowledge about the mechanisms governing such phenomena is therefore of interest for the understanding of our environment and for the design of safe and efficient technical components. The experimental and theoretical investigations, assessment and enhancement techniques covered in this book will be of interest to researchers, scientists, engineers and graduate students as well.

Print ISBN: 978-1-68251-544-0 | \$155 | 2019 | Hardcover

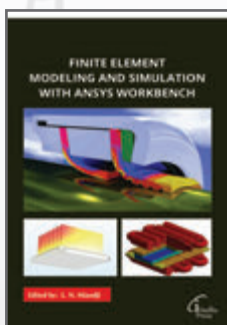


## Acoustic Simulation Using MATLAB and ANSYS

*Editor: Jullia cameron*

This book presents several aspects of the active research ongoing in this field contributed by eminent authors and researchers around the globe involved in research, design, and construction, in addition to the daily use of acoustic systems. Fundamental aspects of acoustics are presented, as they relate to the understanding and application of a methodology for the recognition, evaluation and prevention or control of noise as an occupational hazard. This book also discusses ambient noise problem and devises a new wavelet thresholding method to reduce its effect.

Print ISBN: 978-1-68251-545-7 | \$155 | 2019 | Hardcover



## Finite Element Modeling and Simulation with ANSYS Workbench

*Editor: L. N. Miandji*

Design engineers have to perform various designs of experiments on the product and validate them in an environment which has to keep in mind the complex customer needs. This book covers state of the art research and reviews giving a detailed and practical understanding of using ANSYS's powerful engineering analysis tools. The aim of this book is to automate the FEA process in ANSYS software and prove the advantages of having a parametric design of a model. The book will be of interest for all engineers and students dealing with finite element analysis or to ANSYS software.

Print ISBN: 978-1-68251-546-4 | \$150 | 2019 | Hardcover



## Fluid Power: Components and Systems

*Editor: L. Colantoni*

Fluid power technology has rapidly achieved the status of potential and serious fluid power. Several research branches exist each having their own strengths and challenges. Applications are also emerging. This book reviews recent technology in the fluid power area at both component and system levels. Revealing the development of the fluid and control technology of hydraulic systems, this book will be of essential for students and practitioners as well dealing with fluid power technology and engineering.

Print ISBN: 978-1-68251-547-1 | \$150 | 2019 | Hardcover

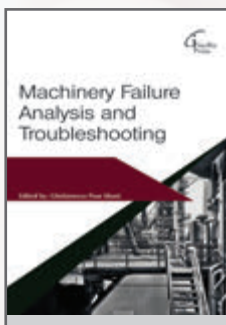


## Fluid Power Systems: Modelling and Diagnostic Techniques

*Editor: Abigail Lopez*

Today fluid power is used extensively in practically every branch of industry including mobile construction and aerospace equipment to powering industrial machinery, and offers several advantages over other types of motive force. This book shows practicing fluid power engineers all they need to know about keeping track of the health of their equipment, processes and products. Modeling techniques based on physical laws and measured performance characteristics will be applied to design and analyze component and system performance; a great interest and value to all practitioners and researchers in the fluid power technology.

Print ISBN: 978-1-68251-548-8 | \$150 | 2019 | Hardcover

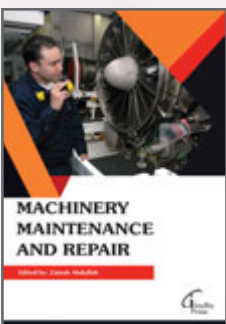


## Machinery Failure Analysis and Troubleshooting

*Editor: Gholamreza Pour khani*

It is significant to reliably detect machinery defects, evaluate their severity, predict the fault propagation trends, and schedule optimized maintenance and inspection activities to prevent unexpected failures. Presenting new methods and tools for equipment condition monitoring, fault diagnostics, and equipment prognostics aiming at predicting fault propagation and remaining useful life; it covers studies that present recent developments in the field of machine fault signature analysis with particular regard to vibration analysis.

Print ISBN: 978-1-68251-549-5 | \$150 | 2019 | Hardcover

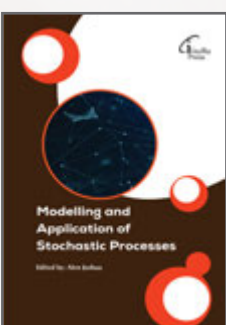


## Machinery Maintenance and Repair

*Editor: Zainah Abdullah*

The reliability and availability of machines and instruments are crucial factors of competitiveness, particularly in applications where safety and availability are important. Revealing state of the art information essentials of machinery prognostics and prognosis oriented maintenance management, this book takes a look at the cutting-edge research and techniques for maintenance and repair. This broadly based volume is designed for students and practitioners dealing with mechanical technology. The book addresses a full range of technologies in mechanical maintenance.

Print ISBN: 978-1-68251-550-1 | \$155 | 2019 | Hardcover



## Modelling and Application of Stochastic Processes

*Editor: Alen Joshua*

Stochastic processes have become a common tool for mathematicians, physicists, engineers, and the field of application of this theory ranges from the modeling of stock pricing, to a rational option pricing theory, to differential geometry. The book is concerned with concepts and techniques, and is oriented towards a broad spectrum of mathematical, scientific and engineering interests. In particular, this book gives an overview of some of the theoretical methods and tools for stochastic analysis, and it presents the applications of these methods to problems in systems theory, science, and economics.

Print ISBN: 978-1-68251-551-8 | \$155 | 2019 | Hardcover



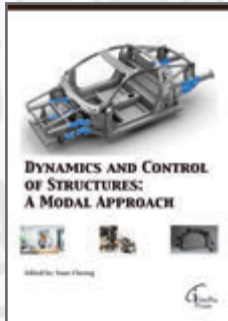


## Mechanical Engineering Systems: Dynamics and Control

*Editor: Nazry Lavy*

In the 21st Century, the opportunities to apply control principles and methods are exploding. Comprehensive information of engineering systems that describes the new challenges posed for twenty-first-century engineers by today's highly complex sociotechnical systems. This book offers comprehensive coverage of topics used in engineering solutions for the stiffness and strength of physical systems, with a range of scales from micrometers to kilometers. This book provides the information necessary to acquire and support complex engineering systems expected to last for a long time.

Print ISBN: 978-1-68251-552-5 | \$155 | 2019 | Hardcover

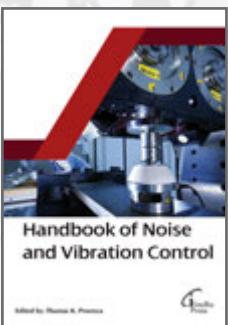


## Dynamics and Control of Structures: A Modal Approach

*Editor: Yuan Cheung*

The dynamic behavior of structures is an imperative theme in different fields. Applications to buildings, bridges and industrial plant have been made in many of the seismically active countries of the world. Aerospace engineers must understand dynamics to simulate space vehicles and airplanes, while mechanical engineers must understand dynamics to isolate or control the vibration of machinery. This book addresses state of the art problems and research in structural dynamics and control faced in applications such as robotics, aerospace structures, earthquake-damage prevention, and active noise suppression.

Print ISBN: 978-1-68251-553-2 | \$155 | 2019 | Hardcover

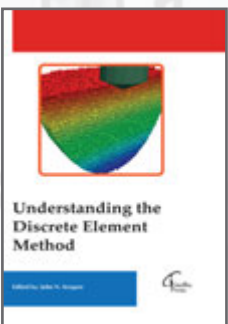


## Handbook of Noise and Vibration Control

*Editor: Thomas K. Proenza*

Effective performance of each vibration control method is contingent to accurate design and proper dynamics selection of the control unit. This book is aimed to real-world applications which imply that a lot of dimensions and practical difficulties must be treated for both scenarios, especially in the area of active noise and vibration control. Research in the engineering aspects of sound and vibration, such as sound propagation and noise control techniques, as well as perception aspects of sound will be considered.

Print ISBN: 978-1-68251-554-9 | \$165 | 2019 | Hardcover



## Understanding the Discrete Element Method

*Editor: John N. Knapen*

The Finite Element Analysis (FEA) has been developed into a key indispensable technology in the modeling and simulation of various engineering systems. Highlighting the vitality and potential of the discrete elements for the future development of more efficient numerical techniques, new areas of application, and Discrete Element Method's important role in practical engineering. This book is recommended for researchers and graduate students who deal with particle models in areas such as fluid dynamics, multi-body engineering, finite-element methods, the geosciences, and multi-scale physics.

Print ISBN: 978-1-68251-555-6 | \$150 | 2019 | Hardcover

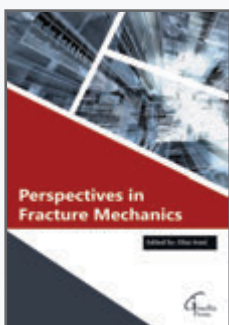


## Computational Mechanics of Solids and Structures

*Editor: R N Natalia*

Computational mechanics has had a reflective impact on science and technology over the past three decades. It has transformed much of classical Newtonian theory into practical tools for prediction and understanding of complex systems. This book is intended to demonstrate a perspective of the major research areas in computational mechanics that will be the focus of inquiry during the next decade for industrial, governmental, university researchers, and those who would implement and apply the research results in computational mechanics.

Print ISBN: 978-1-68251-556-3 | \$150 | 2019 | Hardcover



## Perspectives in Fracture Mechanics

*Editor: Elias Irani*

Portraying Experience Interaction Model (UXIM) which consists of UX-relevant elements from the disciplines industrial design, human factors and psychology to handle this complexity, this work discloses prospective designer techniques and methods of a new age of industrial design, whose practitioners strive to paradigm simple and yet complex products of the future. This book will be a guiding tool to readers in leaping forward in their own practice and in preparing new design research that are relevant and associated with the current challenges of this enthralling field.

Print ISBN: 978-1-68251-557-0 | \$150 | 2019 | Hardcover

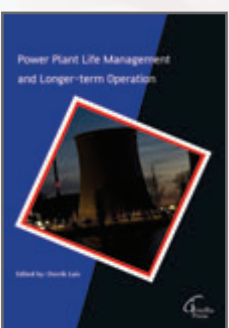


## Principles for UX and Industrial Design

*Editor: Alyssa Tafvelin*

The idea of User Experience (UX) is to accomplish a positive emotional reaction of users on a product interaction and thereby to create a unique selling proposition. Inappropriately, people's needs, perception and resulting emotions are subjective and thereby very diverse. This book emphasizes the multi-dimensional nature of the concept and organizes the current state-of-the-art knowledge. It covers state of the art theoretical descriptions of UX as well as methods for measuring it. A guiding tool to readers in leaping forward in their own practice and in preparing new design research that are relevant and associated with the current challenges of this enthralling field.

Print ISBN: 978-1-68251-558-7 | \$160 | 2019 | Hardcover

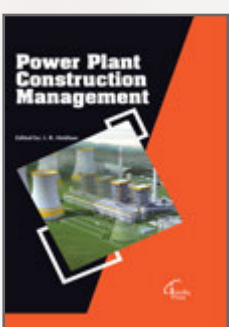


## Power Plant Life Management and Longer-term Operation

*Editor: Derrik Luis*

Energy security is the major concern of today's world. Improving efficiency of the energy systems is an essential option for the security of future energy. This book covers statistics and current trends relating to the extended, longer-term operation of power plants, including economic and environmental benefits and challenges associated with nuclear power plant life management, together with the fundamental degradation mechanisms that affect conventional power plant systems and components. The book will be of interest for power plant operators, industrial engineers and metallurgists, and researchers interested in this important field.

Print ISBN: 978-1-68251-559-4 | \$150 | 2019 | Hardcover

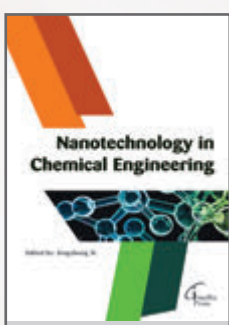


## Power Plant Construction Management

*Editor: I. R. Mokhun*

Thermal power plants are one of the most important process industries for engineering professionals. Over the past decades, the power sector is facing a number of critical issues; however, the most fundamental challenge is meeting the growing power demand in sustainable and efficient ways. This book addresses issues related to both coal fired and steam power plants. The book is suitable for both undergraduate and research higher degree students, and of course for practicing power plant engineers.

Print ISBN: 978-1-68251-560-0 | \$150 | 2019 | Hardcover



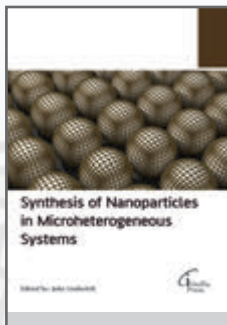
## Nanotechnology in Chemical Engineering

*Editor: Xingzhong Xi*

This book highlights established industrial applications of nanoparticles and then moves to rapidly emerging applications in the chemical industry and discusses future research directions. The book provides vibrant information for advanced graduate students as well as valuable resource for interdisciplinary researchers who want to learn more about how nanomaterials are used in different types of engineering, including electrical, chemical, and bio-medical.

Print ISBN: 978-1-68251-561-7 | \$150 | 2019 | Hardcover





## Synthesis of Nanoparticles in Microheterogeneous Systems

*Editor: John Linderfelt*

Materials scientists and engineers have made significant developments in the improvement of methods of synthesis of nanomaterial solids. This book focuses on classification, methods of preparation, characterization, application, advantages of nanoparticles in a wide variety of substances. Providing a wealth of new ideas in design, synthesis and study of sophisticated nanocomposite structures, this book is intended to the industrial and academic researcher regardless of his arbitrarily defined subfield, be it organic, inorganic, biological, colloid, etc.

Print ISBN: 978-1-68251-562-4 | \$150 | 2019 | Hardcover



## Metal Nanoparticles: Characterization and Applications

*Editor: Jun Fei He*

Rapid growth of new technologies has led to the development of nanoscale device components, advanced sensors, and novel biomimetic materials. Among all nanoparticles, metallic nanoparticles (MNPs) are especially attractive owing to their unique properties and diverse applications. Covering state of the art information on the synthesis of nanoparticles, its applications, and future directions, this book is aimed at inspiring research in this field; serves as a reference guide for academics and professionals working in the field of chemistry and nanotechnology.

Print ISBN: 978-1-68251-563-1 | \$155 | 2019 | Hardcover

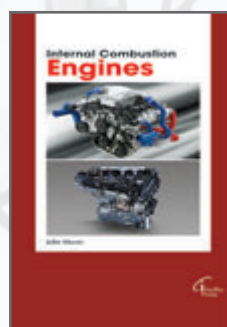


## Smart Nanoparticles Technology

*Editor: Rese Miller*

In the last few years, Nanoparticles and their applications dramatically diverted science in the direction of brand new philosophy. The properties of many conventional materials changed when formed from nanoparticles. Nanoparticles have a greater surface area per weight than larger particles which causes them to be more reactive and effective than other molecules. This book explores the intrinsic properties of nanoparticles and their solicitations in different fields. It contains a number of well researched studies which will assist students and experts interested in the field of nanotechnology.

Print ISBN: 978-1-68251-298-2 | \$155 | 2018 | Hardcover

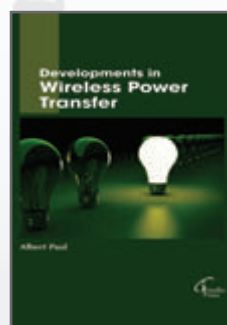


## Internal Combustion Engines

*Editor: John Moore*

This work presents an energetic approach to the performance analysis of internal combustion engines, seen as attractive applications of the principles of thermodynamics, fluid mechanics and energy transfer. Mathematical models for these processes are discussed. It contains a broadly based and extensive review of the fundamental principles which govern internal combustion engine design and operation. It attempts to provide a simplifying framework for the vast and complex mass of technical material that now exists on spark-ignition and compression-ignition engines, and at the same time to include sufficient detail to convey the real world dimensions of this pragmatic engineering field.

Print ISBN: 978-1-68251-302-6 | \$160 | 2018 | Hardcover

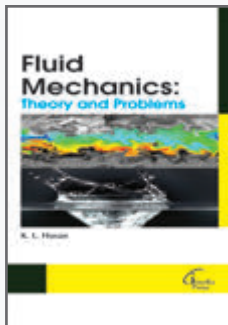


## Developments in Wireless Power Transfer

*Editor: Albert Paul*

Wireless power transfer can make a remarkable change in the field of the electrical engineering which eliminates the use conventional copper cables and current carrying wires. Day by day new technologies are making our life simpler. Wireless charging through resonance could be one of the next technologies that bring the future nearer. In this monograph it has been shown that it is possible to charge low power devices wirelessly via inductive coupling. This work encompasses theory and engineering technology, which are of interest for diverse classes of wireless power transfer. This book is a collection of contemporary research and developments in the area of wireless power transfer technology.

Print ISBN: 978-1-68251-303-3 | \$160 | 2018 | Hardcover

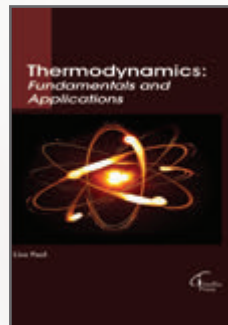


## Fluid Mechanics: Theory and Problems

*Editor: K. L. Husan*

Theory of fluid mechanics play an important role in many areas of science and technology. This work is a compilation of research articles by renowned contributors in their respective field. In this book, effort has been made to introduce students /engineers to fluid mechanics by making explanations easy to understand, including recent information and comparing the theories with actual phenomena. This book will be of valuable tool for students and research workers in mathematics, physics, engineering and other sciences.

Print ISBN: 978-1-68251-304-0 | \$150 | 2018 | Hardcover

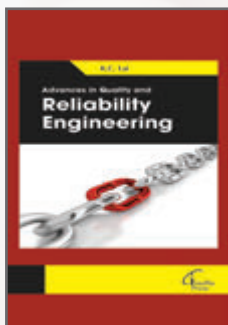


## Thermodynamics: Fundamentals and Applications

*Editor: Lisa Paul*

Thermodynamics is considered to be one of the most important parts of our day-to-day life. Thermodynamics also involves study of various types of power plants like thermal power plants, nuclear power plants, hydroelectric power plants, power plants based on renewable energy sources like solar, wind, geothermal, tides, water waves etc. This work aims to present novel ideas that are crossing traditional disciplinary boundaries and introducing a wide spectrum of viewpoints and approaches in applied thermodynamics of the third millennium. It is expected that this assortment of chapters will contribute to the state of the art in the thermodynamics area.

Print ISBN: 978-1-68251-305-7 | \$150 | 2018 | Hardcover



## Advances in Quality and Reliability Engineering

*Editor: K.C. Lai*

The analysis of failures is very important for revealing the cause of a particular failure, for taking appropriate measures to avoid similar failures in the future, and for improving similar products or processes. Historically, failure analysis has also contributed to the creation of new disciplines of mechanics and other branches, and to the better design and reliability of many products. The book serves as a reference tool for students and scholars interested in quality and reliability in mechanical engineering, manufacturing engineering, and industrial engineering programs. It can be used as a learning resource for practicing engineers.

Print ISBN: 978-1-68251-306-4 | \$150 | 2018 | Hardcover

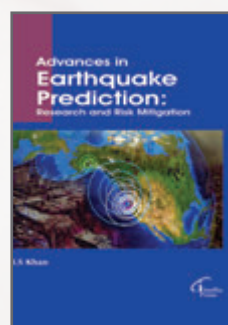


## Earthquake Resistant Design and Risk Reduction

*Editor: H. Smith*

The number of human and economic assets at risk is growing as megacities and urban areas develop all over the world. The book covers seismic-resistance design of masonry and reinforced concrete structures to be constructed as well as safety assessment, strengthening and rehabilitation of existing structures against earthquake loads. This book will be of invaluable reference and guiding tool to practicing civil and structural engineers and architects, researchers and postgraduate students in earthquake engineering and engineering seismology, local governments and risk management officials.

Print ISBN: 978-1-68251-307-1 | \$160 | 2018 | Hardcover



## Advances in Earthquake Prediction: Research and Risk Mitigation

*Editor: I.S. Khan*

Earthquake forecast has been a polemical study theme that has confronted even the most intelligent of minds. In this monograph, an attempt was made to do an extensive overview in the area of the earthquake prediction as well as classifying them into the main strategies comprising short-, immediate-, and long-term prediction. In the last decade, significant improvements have been made in earthquake sciences as well as in their applications for disaster risk reduction. The text is intended to provide varied aspects of earthquake researches, especially to new achievements in seismicity that involves geosciences, assessment, and mitigation.

Print ISBN: 978-1-68251-308-8 | \$150 | 2018 | Hardcover



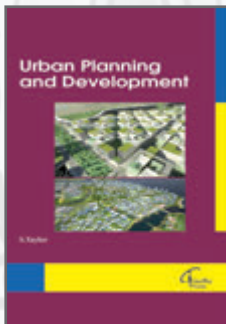


## Earthquake Engineering & Structural Dynamics

*Editor: J.K. Paul*

The design of structures resistant to seismic events is an important field in the structural engineering, because it reduces both the loss of lives and the economic damages that earthquakes can produce. The different perspectives present in the book span from statistical seismology studies, the latest techniques and advances on earthquake precursors and forecasting, as well as, new methods for early detection, data acquisition and interpretation. This Book will be of interest to civil and structural engineers and students with an understanding of the dynamic response of structures to earthquakes and the common analysis techniques employed to evaluate these responses. It will be of great need for practitioners and researchers also.

Print ISBN: 978-1-68251-309-5 | \$150 | 2018 | Hardcover

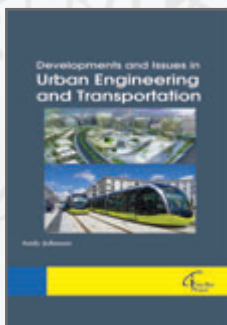


## Urban Planning and Development

*Editor: S.Taylor*

People living in rural areas typically tap the opportunities that cities provide for employment, entrepreneurial avenues, and education. This Book highlights some of the problems and discusses possible solutions in terms of organization, planning and management. This book is a compendium of selected chapters, of great significance for understanding the urban development issues, contributed by well-known authors in this scientific field. All the chapters have been comprehensively reviewed and cover some basic aspects about urban sustainability, urban extension, urban planning, urban setting, housing and land uses.

Print ISBN: 978-1-68251-310-1 | \$150 | 2018 | Hardcover

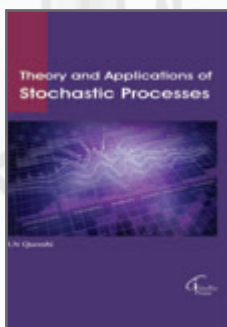


## Developments and Issues in Urban Engineering and Transportation

*Editor: Andy Johnson*

Urban engineering has become a subject of major interest for students, academia and practicing engineers in the government and private sector. Transport plays a crucial role in urban development by providing access for people to education, markets, employment, recreation, health care and other key services. This book will be of interest as a credible source can be very applicable and useful for all professors, researchers, students, experienced technical professionals, practitioners and others interested in urban transportation systems.

Print ISBN: 978-1-68251-311-8 | \$150 | 2018 | Hardcover

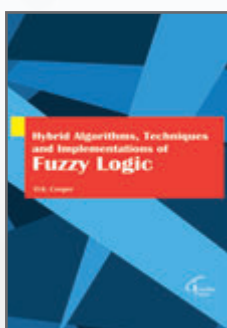


## Theory and Applications of Stochastic Processes

*Editor: I.N Qureshi*

Stochastic processes have played a significant role in various engineering disciplines like power systems, robotics, automotive technology, signal processing, manufacturing systems, semiconductor manufacturing, communication networks, wireless networks etc. This work brings together research on the theory and applications of stochastic processes. This book is designed as an introduction to the ideas and methods used to formulate mathematical models of physical processes in terms of random functions. It is concerned with concepts and techniques, and is oriented towards a broad spectrum of mathematical, scientific and engineering interests.

Print ISBN: 978-1-68251-312-5 | \$150 | 2018 | Hardcover

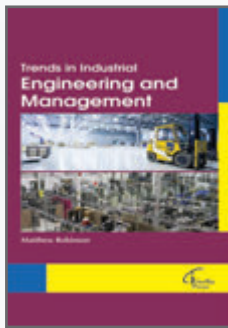


## Hybrid Algorithms, Techniques and Implementations of Fuzzy Logic

*Editor: D.K. Cooper*

Fuzzy set theory has become a popular tool for control applications in recent years. New computing methods based on fuzzy logic can be used in the development of intelligent systems for decision making, identification, pattern recognition, optimization, and control. The focus of the work is extremely useful for many people involved in research and development including engineers, mathematicians, computer software developers and researchers, as well as social scientists, public policy analysts, business analysts, and jurists.

Print ISBN: 978-1-68251-313-2 | \$150 | 2018 | Hardcover

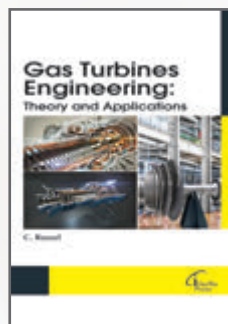


## Trends in Industrial Engineering and Management

*Editor: Matthew Robinson*

A fast paced changing world requires dynamic methods and robust theories to enable designers to deal with the new product development landscape successfully and make a difference in an increasingly interconnected world. This book brings together reviewed and extended studies contributed by renowned researchers, Engineers, and Computer Scientists. It covers all aspects of industrial engineering and management science, and application of a very wide range of management science and engineering technology. This book seeks to contribute to the elucidation of, not only, industrial designers, but also of educational institutions, both domestic and international, about how important it is to follow the development of markets and technology.

Print ISBN: 978-1-68251-314-9 | \$150 | 2018 | Hardcover

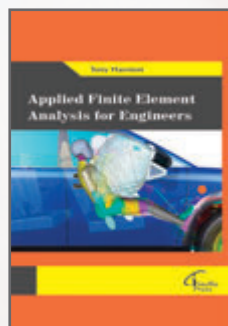


## Gas Turbines Engineering: Theory and Applications

*Editor: C. Russel*

Gas turbines are an energetic and dynamic area of research because they play a prevailing role in the fields of power, propulsion and energy. This book is a comprehensive guide containing emerging topics to assist the next generation of gas turbine experts understand the underlying principles of gas turbine operation, the economic considerations and implications of operating these machines, and how they fit in with alternative methods of power generation. The chapters are contributed by renowned contributors dealing with a wide range of issues related to analysis of gas turbines and their engineering applications.

Print ISBN: 978-1-68251-315-6 | \$150 | 2018 | Hardcover

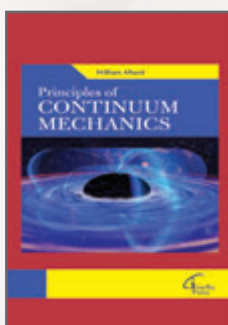


## Applied Finite Element Analysis for Engineers

*Editor: Tony Harmon*

The use of the finite element in engineering applications has developed promptly in recent years. Finite element analysis (FEA) is based on numerical computation that computes all parameters and boundaries given. Supported with powerful computer processors and continuous software development, the finite element method is rapidly advancing. The use of finite element analysis is not limited to the engineering field, as there are also medical and geospatial applications. This book covers theoretical and practical knowledge of the finite element method, contained chapters are contributed by renowned experts from international scientific community and collects original and innovative research studies on recent applications of FEA in major topics of engineering

Print ISBN: 978-1-68251-316-3 | \$150 | 2018 | Hardcover

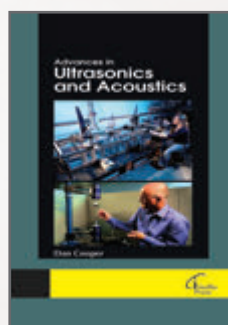


## Principles of Continuum Mechanics

*Editor: William Albar*

Continuum mechanics is a mathematical framework for studying the transmission of force through and deformation of materials of all types. Engineering students need a firm understanding of classical models such as the linear viscous fluids and infinitesimal elasticity. The relationship of the classical theories to nonlinear models is essential in light of the increasing reliance, by engineering designers and researchers, on prepackaged computer codes. This Book will be valuable to students and researchers from different fields benefited from reading the mechanics approached to real engineering problems.

Print ISBN: 978-1-68251-317-0 | \$150 | 2018 | Hardcover



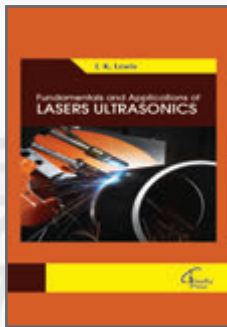
## Advances in Ultrasonics and Acoustics

*Editor: Dan Cooper*

Ultrasonic waves proved to be an excellent method for determining the depth of water. Sound detection is critical in the development of many systems such as meters or other sensing systems. Acoustic evaluation of porous materials can take advantage of some very specific acoustic phenomena that occur only in fluid-saturated consolidated solids of continuously connected pore structure. This book presents a number of state-of-the-art applications of ultrasonic waves, developed by the main researchers in their scientific fields from all around the world. Readers will find this book a valuable source of information where authors describe their works in a clear way, basing them on relevant bibliographic references and actual challenges of their field of study.

Print ISBN: 978-1-68251-318-7 | \$150 | 2018 | Hardcover



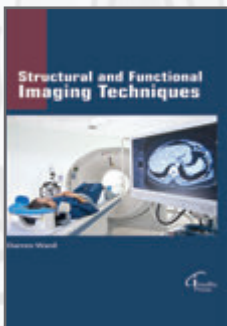


## Fundamentals and Applications of Lasers Ultrasonics

*Editor: I. K. Lewis*

Laser ultrasonic techniques are only likely to find industrial application where they answer a need that cannot be met by conventional transducers. The book reviews acoustic-optics, various acousto-optic devices, and noninterferometric optical methods of measuring ultrasonic displacements. Conventional ultrasonic techniques have long been recognized for their usefulness in the nondestructive testing of materials and structures. Readers will find this book a valuable source of information where authors describe their works in a clear way, and actual challenges of their field of study.

Print ISBN: 978-1-68251-319-4 | \$150 | 2018 | Hardcover

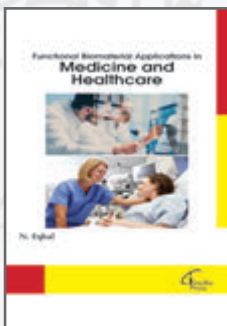


## Structural and Functional Imaging Techniques

*Editor: Darren Ward*

This collection covers the numerous structural and functional imaging techniques contributed by renowned experts in their particular fields. Indeed, the number of peer-reviewed research articles using these techniques has grown at an exponential rate during this period. Inevitably, investigators have become interested in mapping neuroplastic changes that support learning and memory using functional neuroimaging, and concomitantly, rehabilitation researchers have become interested in mapping changes in brain systems responsible for treatment effects during the rehabilitation of patients with stroke, traumatic brain injury, and other brain injury or disease.

Print ISBN: 978-1-68251-320-0 | \$150 | 2018 | Hardcover



## Functional Biomaterial Applications in Medicine and Healthcare

*Editor: N. Egbal*

Nowadays, biomaterials are commonly used in various medical devices and systems; synthetic skin; drug delivery systems; tissue cultures; hybrid organs; synthetic blood vessels; artificial hearts; cardiac pacemakers; screws, plates, wires and pins for bone treatments; total artificial joint implants; skull reconstruction; dental and maxillofacial applications. This work covers advances in processing technologies and our understanding of materials and their properties have made it possible for scientists and engineers to develop more sophisticated biomaterials with more targeted functionality. This book will appeal to scientists, engineers, and clinicians, and a useful reference text for students.

Print ISBN: 978-1-68251-321-7 | \$150 | 2018 | Hardcover



## Biomaterials and Nanobiotechnology

*Editor: J. Hasan*

Today, nanomaterials have been designed for a variety of biomedical and biotechnological applications, including biosensors, enzyme encapsulation; neuronal nanotechnology is based on the introduction of novel nano-materials which can result in revolutionary new structures and devices using extremely biological sophisticated tools to precisely position molecules. This book covers the studies of the preparation, performance, and evaluation of biomaterials; the chemical, physical, toxicological, mechanical, electrochemical and optical behavior of nanostructured materials for biotechnology applications.

Print ISBN: 978-1-68251-322-4 | \$150 | 2018 | Hardcover

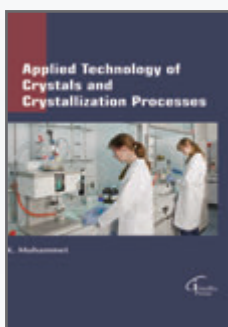


## New Developments for Advanced Manufacturing

*Editor: James Nike*

Manufacturing technology provides the productive tools that power a growing, stable economy and a rising standard of living. This work brings together selected recent advances, tools, application and new ideas in manufacturing systems. It discourses issues essential to modern manufacturing, ranging from traditional topics such as casting, forming, machining, and joining, to advanced topics such as the fabrication of nanomaterials. Comprehensive coverage of relevant engineering fundamentals and traditional as well as advanced applications of manufacturing processes and operations.

Print ISBN: 978-1-68251-323-1 | \$150 | 2018 | Hardcover

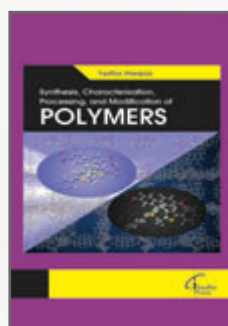


## Applied Technology of Crystals and Crystallization Processes

*Editor: K. Muhammet*

In nearly all process industries, crystallization is used at some stage as a method of production, purification or recovery of solid materials. This book is intended to refresh your theoretical and practical knowledge on crystallization and to demonstrate the problems and challenges commonly occurred in crystallization, covering the basic sciences, engineering aspects and applied technology of crystals and crystallization processes, both the experimental and theoretical aspects including physical, chemical, and biological phenomena and processes related to the design, growth, and application of crystalline materials.

Print ISBN: 978-1-68251-324-8 | \$150 | 2018 | Hardcover



## Synthesis, Characterization, Processing, and Modification of Polymers

*Editor: Vasilios Hinojosa*

This work brings together selected recent advances, tools, application and new ideas in manufacturing systems. Comprehensive coverage of relevant engineering fundamentals and traditional as well as advanced applications of manufacturing processes and operations. This comprehensive guide will be of useful resource for industrial engineers, technicians and researchers in polymer chemistry and physics, material science, and analytical chemistry applicable to characterizing molecular, compositional, rheological, and thermodynamic properties of elastomers and plastics.

Print ISBN: 978-1-68251-325-5 | \$150 | 2018 | Hardcover



## Conducting Polymers Application

*Editor: Bin Shang*

Conducting polymers have been studied extensively due to their intriguing electronic and redox properties, along with the resulting numerous potential applications in many fields since their discovery in 1970s. This work contains the contributions of several authors in the area of polymer physics by application of conducting polymers; hydrogel films on optical fiber core; thin film polymers; PDLC films application; photopolymers for holographic media; microwave absorption and EMI shielding behavior of nanocomposites based on intrinsically conducting polymers and graphene and carbon nanotubes; in the area of polymer synthesis of conducting polymers.

Print ISBN: 978-1-68251-326-2 | \$150 | 2018 | Hardcover

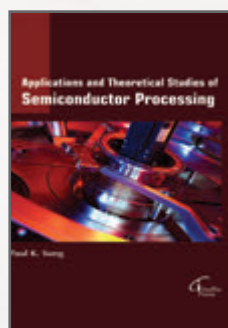


## Characteristics and Materials of Semiconductors

*Editor: Iztok Marnik*

Semiconductor devices have become indispensable for generating electromagnetic radiation in every day applications. Visible and infrared diode lasers are at the core of information technology, and at the other end of the spectrum, microwave and radio frequency emitters enable wireless communications. This comprehensive guide brings together research studies and articles by providing detailed explanations of the electronic, vibrational, transport, and optical properties of semiconductors. This book will be of interest to students, researchers, as well as professionals in Electronics Engineering

Print ISBN: 978-1-68251-327-9 | \$150 | 2018 | Hardcover



## Applications and Theoretical studies of Semiconductor Processing

*Editor: Paul K. Sung*

Semiconductor devices have demoralized materials, physics and imaginative applications to offspring new lifestyles. Semiconductor devices have changed the face of electronics today. The chapters of the Book provide a snapshot of current insights, new achievements, breakthroughs and future trends in such diverse fields as microelectronics, energy conversion and storage, communications, biotechnology, (photo)catalysis, nano- and thin-film technology, hybrid and composite materials, chemical processing, vapor-phase deposition, device fabrication, and modelling, which are the backbone of advanced semiconductor processing and applications.

Print ISBN: 978-1-68251-328-6 | \$150 | 2018 | Hardcover





## Developments in Digital Signal Processing and Noise Reduction Techniques

*Editor: Jheng Duan*

The theory and application of signal processing is concerned with the identification, modelling and utilization of patterns and structures in a signal process. This Book provides a lucid and designed presentation of the theory and applications of statistical signal processing and noise reduction approaches. Digital signal processing techniques are increasingly replacing conventional analog signal processing methods in many fields, such as speech analysis and processing, radar and sonar signal processing, biomedical signal analysis and processing, telecommunications, and geophysical signal processing.

Print ISBN: 978-1-68251-329-3 | \$150 | 2018 | Hardcover

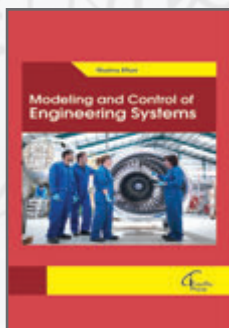


## Software and Systems Modeling

*Editor: Chaohua Chen*

Systems modeling is the interdisciplinary study of the use of models to conceptualize and construct systems in business and IT development. This work brings together original and innovative research studies concerning modeling and simulation of physical systems in a very wide range of applications, encompassing micro-electro-mechanical systems, measurement instrumentations, and more. It presents rigorous analyses of modeling experiences, and present scalable modeling techniques and processes that facilitate rigorous and economical development of software.

Print ISBN: 978-1-68251-330-9 | \$150 | 2018 | Hardcover

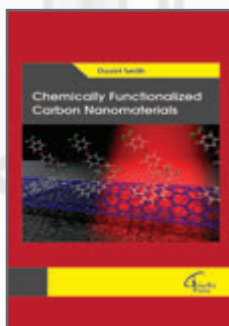


## Modeling and Control of Engineering Systems

*Editor: Shamsa Khan*

Proper control of an engineering system requires a basic understanding and a suitable representation of the system. This book builds up expertise in modeling and control so that readers can further their analytical skills in hands-on settings. Overcoming the deficits of other modeling and control books, this text relates the model to the physical system and discourses why a specific control technique is apposite for controlling the system. It provides a unified approach of the modeling of mechanical, electrical, fluid, and thermal systems and covers conventional, advanced, and intelligent control, instrumentation, experimentation, and design.

Print ISBN: 978-1-68251-331-6 | \$150 | 2018 | Hardcover

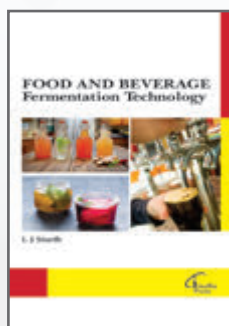


## Chemically Functionalized Carbon Nanomaterials

*Editor: Daniel Smith*

Carbon nanomaterials have been receiving much attention for their interesting properties over the past three decades. This work serves as a comprehensive examination of carbon nanomaterials, with their deviations and how they can be chemically functionalized. It covers important current research on chemical functionalization of carbon-based nanomaterials and discusses the chemistry of different surface functionalization techniques.

Print ISBN: 978-1-68251-332-3 | \$150 | 2018 | Hardcover



## Food and Beverage Fermentation Technology

*Editor: I. J. Sturth*

The tradition of fermented beverages is long embedded in many cultures, and despite traditional production technologies remaining, there is potential for extension services to introduce some improved methods, particularly those for hygiene and safety. It highlights the opportunities and challenges associated with small-scale fermentation activities, as well as more formal operations on farm, and different marketing and selling strategies to achieve a successful livelihood diversification option.

Print ISBN: 978-1-68251-367-5 | \$155 | 2018 | Hardcover



## Engineering Mechanics: Methods and Principles

*Editor: E. Stefen*

Engineering mechanics is the application of mechanics to solve problems involving common engineering elements. This book aims to reveal theory and problems in mechanics as applied to plausibly real-world scenarios. This Book will be of beneficial to students, researcher and scholars specializing in mechanics, engineering science, engineering physics, applied mathematics, materials science, and mechanical, aerospace, and civil engineering. Professionals working in related fields of applied mathematics will find it a practical review and a quick reference for questions involving basic kinematics.

Print ISBN: 978-1-68251-368-2 | \$155 | 2018 | Hardcover



## Communications System Engineering Handbook

*Editor: Albert Brown*

Today's communication systems are increasingly complex. Communications system engineering may involve developing or maintaining cable-based or wireless telephone and voicemail systems, group scheduling programs, webinars, Voice over Internet Protocol or automatic call answering and routing systems. This book will cover fundamentals of digital communications and networking. You will study the basics of information theory, sampling and quantization, coding, modulation, signal detection and system performance in the presence of noise. The study of data networking will include multiple access, reliable packet transmission, routing and protocols of the internet.

Print ISBN: 978-1-68251-369-9 | \$155 | 2018 | Hardcover

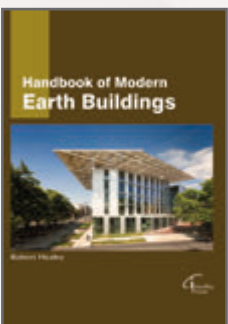


## Building Construction Handbook

*Editor: Chin Yuan*

This book presents an overview of the different aspects of resource and material efficiency in building construction. It provides essential information that will help improve efficiency, productivity and competitiveness in world markets. It includes original research, state-of-the-art review articles, discussion papers, innovative industrial application, insightful case studies, and reviews from experts in the field of building construction and planning. It is vital reading for all professionals and academics involved with research into, or specification of, building materials.

Print ISBN: 978-1-68251-371-2 | \$155 | 2018 | Hardcover

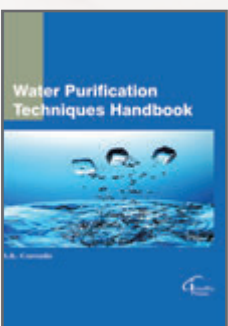


## Handbook of Modern Earth Buildings

*Editor: Robert Healey*

The construction industry is one of the largest sectors in most economies, accounting for a considerable percent of the gross domestic product (GDP) and employing a sizeable percent of total labor force. For the economy to perform, it is important that construction-related activities are delivered to a high standard, with state-of-the-art technology, materials and techniques. This book presents an essential investigation of the materials and techniques essential to the design, development and construction of modern earth buildings. The construction of earth buildings has been taking place worldwide for centuries.

Print ISBN: 978-1-68251-372-9 | \$155 | 2018 | Hardcover



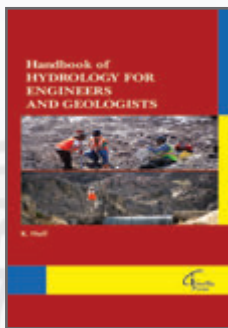
## Water Purification Techniques Handbook

*Editor: S.K. Corrado*

As concerns increase over the scarcity of water resources and the role of anthropogenic activities, water quality is increasingly important. This work covers a number of water quality issues relevant to either improving the existing treatment methods or to new advanced approaches. It consists of contributions by authors in various water-related fields, delves into some approaches that are used to understand and/or to improve water quality, and these include assessment of water chemistry, biomonitoring, modelling and water treatment.

Print ISBN: 978-1-68251-373-6 | \$155 | 2018 | Hardcover





## Handbook of Hydrology for Engineers and Geologists

*Editor: K. Huff*

Water is fundamental to human life and many activities—most obviously agriculture but also industry, power generation, transportation, and waste management—and the availability of clean water often is a constraint on economic development. This work provides informed material on hydrological science and engineering, discussing recent developments as well as classic approaches. This Book addresses the understanding of the implications of climate change for the hydrological cycle, water resources, and their management. This resource will be of keen interest to students, practitioners, policy makers, consultants and researchers.

Print ISBN: 978-1-68251-374-3 | \$155 | 2018 | Hardcover

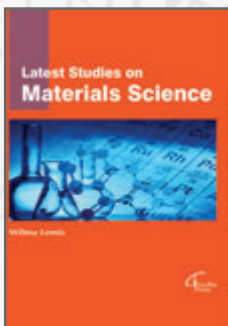


## Handbook of Biomaterials and Biomedical Engineering

*Editor: I.S. Alexander*

Biomaterials have revolutionized the areas like bioengineering and tissue engineering for the development of novel strategies to combat life threatening diseases. Together with biomaterials, stem cell technology is also being used to improve the existing healthcare facilities. This book is intended to present the latest research and development carried out in the areas of biomedical engineering, biomaterials and nanomaterials science and to highlight the applications of such systems. It covers a wide range of research areas including basic materials science, biocompatibility, implant device development, surgical applications, and failure analysis and has application throughout most physiologic system.

Print ISBN: 978-1-68251-375-0 | \$155 | 2018 | Hardcover

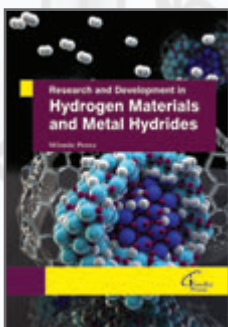


## Latest Studies on Materials Science

*Editor: Wilma Lemis*

Materials are crucial to the performance and reliability of virtually every technology and the vitality and health of any living organism. This book aims to bring together significant findings of leading experts, in developing and improving the technology that supports advanced materials and process development. The contributors of the chapters in this book have various areas of expertise. Therefore this book is interdisciplinary and is designed for readers with backgrounds in physical science. It is envisaged that it will promote knowledge transfer across the materials society including university students, engineers and scientists to build further understanding of the subject.

Print ISBN: 978-1-68251-380-4 | \$155 | 2018 | Hardcover

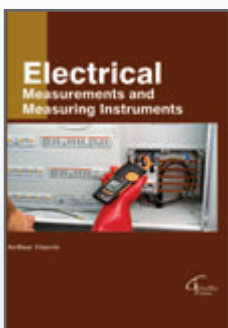


## Research and Development in Hydrogen Materials and Metal Hydrides

*Editor: Winnie Perez*

A large challenging of world economic development is to meet the demand of energy consumption while reducing emissions of greenhouse gases and pollutants. Hydrogen, as an energy carrier, is widely regarded as a potential cost effective, renewable, and clean energy alternative to petroleum, especially in the transportation sector. Hydrogen is an ideal energy carrier which is considered for future transport, such as automotive applications. The present book reports recent developments of metal hydrides on properties including hydrogen-storage capacity, kinetics, cyclic behavior, toxicity, pressure and thermal response.

Print ISBN: 978-1-68251-381-1 | \$155 | 2018 | Hardcover

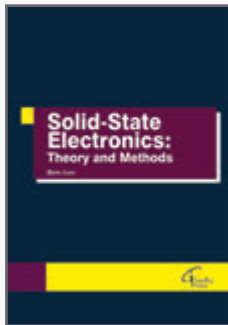


## Electrical Measurements And Measuring Instruments

*Editor: Arthur Harris*

This work brings together explains the basic measurement techniques, instruments, and methods used in everyday practice. It aims at bridging traditional concepts with modern technologies of electrical and electronics measurements and instrumentation. Since the basic concepts cut across disciplines—such as electrical, mechanical, electronics, instrumentation and control engineering—this book presents a proper balance between theoretical and analytical approach, as well as practical illustrations along with computational approach for solving various kinds of numerical problems.

Print ISBN: 978-1-68251-382-8 | \$155 | 2018 | Hardcover

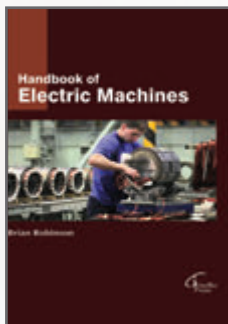


## Solid-state Electronics: Theory and Methods

*Editor: Ben Lee*

Solid-state electronic devices are part of our everyday lives. This book covers applications of solid-state physics and technology to electronics and optoelectronics, including theory and device design with appropriate experimental backup; optical, electrical, morphological characterization techniques and parameter extraction with experimental application to real devices; device fabrication and synthesis, including device-related new materials growth, electro-optical characterization and performance evaluation.

Print ISBN: 978-1-68251-383-5 | \$155 | 2018 | Hardcover

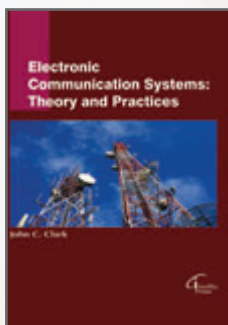


## Handbook of Electric Machines

*Editor: Brian Robinson*

Electric machines have become so ubiquitous that they are virtually overlooked as an integral component of the entire electricity infrastructure. Developing ever more efficient electric machine technology and influencing their use are crucial to any global conservation, green energy, or alternative energy strategy. This comprehensive work brings to the fore, various types of electrical machines, their operations, and applications, as well as the method of determining their parameters. Various ways of protecting electric machines against overloads and mechanical faults are also highlighted.

Print ISBN: 978-1-68251-384-2 | \$155 | 2018 | Hardcover

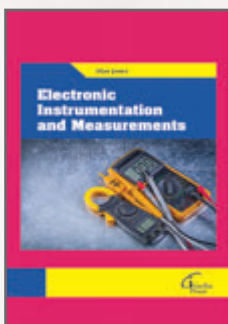


## Electronic Communication Systems: Theory and Practices

*Editor: John C. Clark*

The process of communication is inherent to all human life and includes verbal, nonverbal, print, and electronic processes. This inclusive guide provides electronics technologists with an extraordinarily complete, accurate, and timely introduction to all of the state-of-the-art technologies used in the communications field today. Comprehensive coverage includes traditional analog systems, as well as modern digital techniques. Extensive discussion of today's modern wireless systems- including cellular, radio, paging systems, and wireless data networks- is also included. It is intended for use as a reference tool for students and researchers involved in the field of Communication Systems.

Print ISBN: 978-1-68251-385-9 | \$150 | 2018 | Hardcover

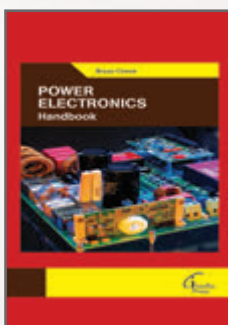


## Electronic Instrumentation and Measurements

*Editor: Alan Jones*

In the world of mechanical devices today, most measurements are made by electronic instrumentation, not the crude mechanical devices of the past. Most of these newer devices are actually a modern combination of a mechanical device and electronic sensing element. This collection is designed to introduce some of the more common basic instrumentation and its use. Electronic Instrumentation and Measurements is designed as a reference tool for students and practitioners involved in electrical, electronics, and instrumentation disciplines

Print ISBN: 978-1-68251-386-6 | \$150 | 2018 | Hardcover



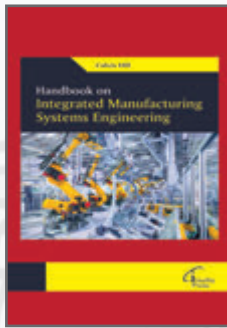
## Power Electronics Handbook

*Editor: Bryan Green*

Power electronics is one of the contemporary subjects of electrical engineering which has seen a lot of advancements in recent times and has impacted human life in almost every sphere. This literature covers the basics of power electronics theory and components while emphasizing modern low-power components and applications. Trends and future prospects in utility applications of power electronics are presented. Some practical applications, which cover a wide range of power electronics equipment in power systems, are highlighted.

Print ISBN: 978-1-68251-387-3 | \$150 | 2018 | Hardcover



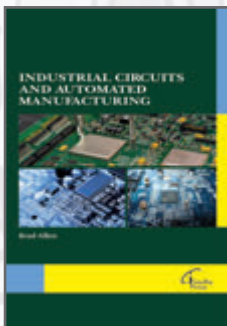


## Handbook on Integrated Manufacturing Systems Engineering

*Editor: Calvin Hill*

Modern manufacturing systems must be engineered as any other complex systems, especially in the context of their integration. Manufacturing industries endeavor to reduce the cost of the product continuously to remain competitive in the face of global competition. This book presents the all-embracing concept of the Extended Enterprise as way of inter-enterprise integration. It then focusses on Enterprise Engineering methods and tools to address intra-enterprise integration using a model-based approach. Business process modelling and re-engineering issues are particularly discussed and tools presented.

Print ISBN: 978-1-68251-388-0 | \$160 | 2018 | Hardcover

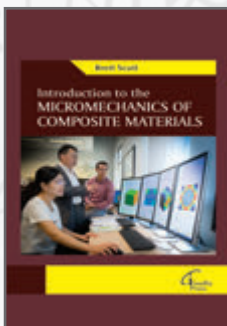


## Industrial Circuits and Automated Manufacturing

*Editor: Brad Allen*

Due to the rapid advances in technology, all industrial processing systems, factories, machinery, test facilities, etc. turned from mechanization to automation. A mechanization system needs human intervention to operate the manual operated machinery. This book discusses the benefits and pitfalls associated with lean manufacturing management starting from the kernel idea that pleasing the customer should be at the root of all effort leading through the ravages of overzealous application of "lean to the max."

Print ISBN: 978-1-68251-389-7 | \$150 | 2018 | Hardcover



## Introduction to the Micromechanics of Composite Materials

*Editor: Brett Scott*

This work provides a comprehensive overview of all micromechanics formulations in use today and a unified approach that works for the multiscale analysis and design of multi-phased composite materials, considering both small strain and large strain formulations. This Book will appeal to academic professionals and practicing engineers in the field of composite mechanics; aerospace and automotive engineers wanting to design and analyze composite materials.

Print ISBN: 978-1-68251-390-3 | \$150 | 2018 | Hardcover



## Managing Innovative Manufacturing

*Editor: Beatrix Potter*

Manufacturing is the production of merchandise for use or sale using labor and machines, tools, chemical and biological processing, or formulation. The term may refer to a range of human activity, from handicraft to high tech, but is most commonly applied to industrial production, in which raw materials are transformed into finished goods on a large scale. Modern manufacturing includes all intermediate processes required for the production and integration of a product's components. This book discusses how to manage innovative manufacturing.

Print ISBN: 978-1-68251-231-9 | \$150 | 2017 | Hardcover



## Logistics Systems: Design and Optimization

*Editor: B. Milne*

Logistics is generally the detailed organization and implementation of a complex operation. In a general business sense, logistics is the management of the flow of things between the point of origin and the point of consumption in order to meet requirements of customers or corporations. The concept of logistics can be applied to specific areas of business. This book advocates a holistic approach to designing efficient logistics systems that can adapt to changing environments.

Print ISBN: 978-1-68251-205-0 | \$155 | 2017 | Hardcover



## Robust Manufacturing Control

*Editor: Ben Zhu*

This book covers robust design for both static and dynamic systems using the nominal model information or the hybrid model/data information, and also integrates design with control under a large operating region. This diverse aspects of robust manufacturing control involves robust manufacturing system configuration design. It present the latest developments and new ideas focusing on robust manufacturing control for global networks.

Print ISBN: 978-1-68251-206-7 | \$155 | 2017 | Hardcover

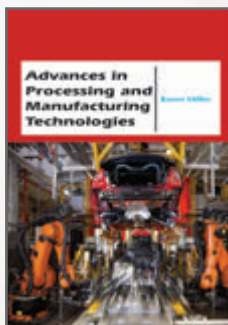


## Analysis of Manufacturing Enterprises

*Editor: Rese Morgan*

Manufacturing enterprises are the enterprises engaged in the manufacture or production of goods pertaining to any industry specified in the first schedule to the industries or employing plant and machinery in the process of value addition to the final product having a distinct name or character or use. A manufacturing enterprise plays a key role in a traditional distribution channel. A distribution channel is a collection of companies that take products from manufacture to end consumer. This book presents a unified and systematic treatment of manufacturing enterprises.

Print ISBN: 978-1-68251-207-4 | \$150 | 2017 | Hardcover

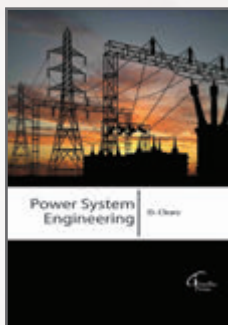


## Advances in Processing and Manufacturing Technologies

*Editor: Karen Miller*

Manufacturing technology provides the tools that enable production of all manufactured goods. These master tools of industry magnify the effort of individual workers and give an industrial nation the power to turn raw materials into the affordable, quality goods essential to today's society. This book presents guidelines for selecting the proper engineering materials, manufacturing processes, and equipment. It also covers the basics as well as the most recent advances in manufacturing technology.

Print ISBN: 978-1-68251-208-1 | \$160 | 2017 | Hardcover

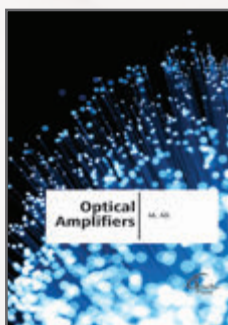


## Power System Engineering

*Editor: D. Cleary*

Power systems engineering is a subfield of energy engineering and electrical engineering that deals with the generation, transmission, distribution and utilization of electric power and the electrical devices connected to such systems including generators, motors and transformers. This book offers a complete overview of power systems and their power electronics applications, and presents a thorough examination of the fundamental principles, combining theories and technologies that are usually treated in separate specialized fields, in a single unified hierarchy.

Print ISBN: 978-1-68251-232-6 | \$150 | 2017 | Hardcover



## Optical Amplifiers

*Editor: M. Ali*

Optical amplifier is a device that amplifies an optical signal directly, without the need to first convert it to an electrical signal. An optical amplifier may be thought of as a laser without an optical cavity, or one in which feedback from the cavity is suppressed. Optical amplifiers are important in optical communication and laser physics. This book provides a comprehensive treatment of the design and applications of the optical amplifier.

Print ISBN: 978-1-68251-233-3 | \$150 | 2017 | Hardcover





## Industrial & Manufacturing Systems Handbook

*Editor: Alexander Smith*

A manufacturing system is defined as the arrangement and operation of machines, tools, material, people and information to produce a value-added physical, informational or service product whose success and cost is characterized by measurable parameters. This book focuses on the effects of unreliability, variability, and finite storage space on system performance; and control theoretic methods for operating advanced manufacturing systems to obtain high performance.

Print ISBN: 978-1-68251-209-8 | \$160 | 2017 | Hardcover



## Industrial Circuits and Automated Manufacturing Handbook

*Editor: C. Walker*

Manufacturing systems consist of human workers, automation, and various material handling technologies, configured in ways that create specific manufacturing system typologies. This book addresses some of the fundamental aspects as related to the automation of processing equipment used in integrated circuit manufacturing. It also provides comprehensive coverage of components, circuits, instruments, and control techniques used in industrial automated industry.

Print ISBN: 978-1-68251-210-4 | \$160 | 2017 | Hardcover

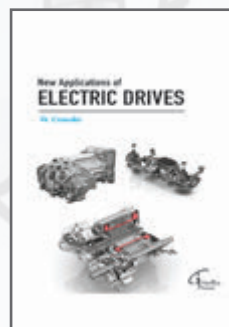


## Digital Electronics

*Editor: Mccall Tokheim*

Digital electronics are electronics that handle digital signals—discrete bands of analog levels—rather than by continuous ranges. All levels within a band of values represent the same numeric value. Digital electronic circuits are usually made from large assemblies of logic gates, simple electronic representations of Boolean logic functions. This book offers a friendly presentation of the fundamental principles and practices of modern digital design.

Print ISBN: 978-1-68251-211-1 | \$150 | 2017 | Hardcover

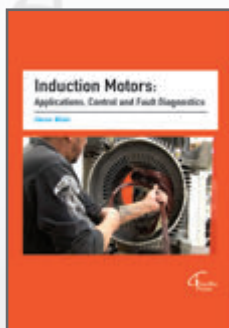


## New Applications of Electric Drives

*Editor: W. Crowder*

Electrical drives have become the most essential equipment nowadays in the electrical motors and other rotating machines. In very simple words, the systems which control the motion of the electrical machines, are known as electrical drives. A typical drive system is assembled with an electric motor and a sophisticated control system that controls the rotation of the motor shaft. This book focuses on the selection and application of electrical drives and control systems for electromechanical and mechatronics applications makes it uniquely useful for engineers in industry working with machines and drives.

Print ISBN: 978-1-68251-212-8 | \$150 | 2017 | Hardcover



## Induction Motors: Applications, Control and Fault Diagnostics

*Editor: Steve Blair*

Induction motors is a type of electric motor in which alternating current from a power source is fed through a primary winding and induces a current in a secondary winding, with the parts arranged so that the resulting magnetic field causes a movable rotor to rotate with respect to a fixed stator. This book comprehends the applications, control and fault diagnostics of induction motors.

Print ISBN: 978-1-68251-213-5 | \$150 | 2017 | Hardcover



## Advances in Industrial Design Engineering

*Editor: H.S. Smith*

Industrial design is a process of design applied to products that are to be manufactured through techniques of mass production. The field of industrial design is one that serves as a sort of confluence point for engineering, art and imagination. This book assists readers in leaping forward in their own practice and in preparing new design research that is relevant and aligned with the current challenges of this fascinating field.

Print ISBN: 978-1-68251-214-2 | \$160 | 2017 | Hardcover

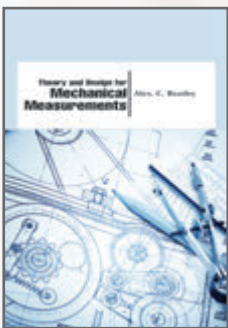


## Fuzzy Logic: Controls, Concepts, Theories and Applications

*Editor: Yuan chen*

Fuzzy logic is a type of mathematics and programming that more accurately represents how the human brain categorizes objects, evaluates conditions, and processes decisions. Fuzzy logic has been applied to many fields, from control theory to artificial intelligence. This book introduces new concepts and theories of fuzzy logic control for the application and development of robotics and intelligent machines.

Print ISBN: 978-1-68251-215-9 | \$150 | 2017 | Hardcover



## Theory and Design for Mechanical Measurements

*Editor: Alex. C. Beasley*

Measurements are one of crucial parts of not only mechanical engineering but all types of engineering fields. Every branch of engineering involves two processes: design, and operations and maintenance. Measurement is the process of comparing unknown magnitude of certain parameter with the known predefined standard of that parameter. This book emphasizes the conceptual design framework for selecting and specifying equipment, test procedures and interpreting test results.

Print ISBN: 978-1-68251-216-6 | \$150 | 2017 | Hardcover



## Stochastic Processes in Mechanical Engineering

*Editor: Walter H. Moore*

A stochastic process is a random process evolving with time. It addresses topics of interest to engineers, such as problems in modelling, control, reliability maintenance, data analysis and engineering involvement with insurance. Stochastic or random vibrations occur in a variety of applications of mechanical engineering. This book presents a self-contained introduction to stochastic processes with emphasis on their applications in science and engineering.

Print ISBN: 978-1-68251-217-3 | \$150 | 2017 | Hardcover



## Industrial Motion Control

*Editor: D. Clarke*

Motion control is widely used in all types of industries including packaging, assembly, textile, paper, printing, food processing, wood products, machinery, electronics and semiconductor manufacturing. Industrial motion control applications use specialized equipment and require system design and integration. This book presents basic principles and the functionality of motion control systems, followed by a closer look on the different types of electrical motors and feedback components.

Print ISBN: 978-1-68251-218-0 | \$150 | 2017 | Hardcover



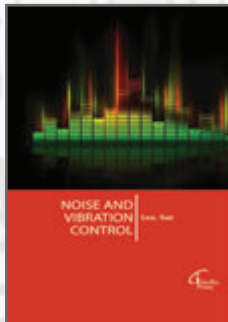


## Optomechanical Systems Engineering

*Editor: C. Maikel*

This book emphasizes a practical, systems-level overview of optomechanical engineering, showing throughout how the requirements on the optical system flow down to those on the optomechanical design. It reviews how optical system concepts flow down into optomechanical requirements on optical fabrication, alignment, structural design, mechanics of materials, structural vibrations, thermal management, and kinematic mounts.

Print ISBN: 978-1-68251-219-7 | \$150 | 2017 | Hardcover

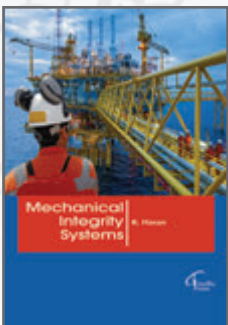


## Noise and Vibration Control

*Editor: Leo.sue*

Vibration and noise are two interrelated terms in the field of mechanical engineering. Noise control is a set of strategies to reduce noise pollution or to reduce the impact of that noise, whether outdoors or indoors. Vibration is caused by unbalanced inertial forces and moments whereas noise is the result of such vibrations. This book deals with such industrial and automotive noise and vibration, their measurement and control.

Print ISBN: 978-1-68251-220-3 | \$150 | 2017 | Hardcover



## Mechanical Integrity Systems

*Editor: R. Hasan*

Mechanical integrity is defined as the management of critical process equipment to ensure it is designed and installed correctly, and that it operates and is maintained properly. A mechanical integrity program should take into account the inspection and testing of the equipment using procedures that are recognized and generally accepted good engineering practices, and should also consider the suitability of newly-fabricated equipment for usage. This book recommends efficient approaches for establishing a successful mechanical integrity systems.

Print ISBN: 978-1-68251-221-0 | \$150 | 2017 | Hardcover

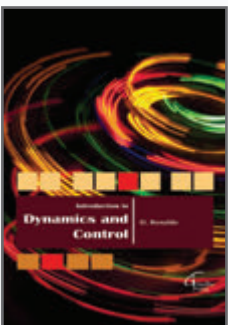


## Fundamentals of Noise and Vibration Analysis for Engineers

*Editor: M. Eqbal*

Noise and vibration affect engineering structures of all kinds. This book provides an excellent resource for students from automotive, aerospace, mechanical, or electronics industries who work with experimental or analytical vibration analysis and/or acoustics. It offers an invaluable, integrated guide for practicing engineers as well as a suitable introduction for students new to the topic of noise and vibration.

Print ISBN: 978-1-68251-222-7 | \$150 | 2017 | Hardcover



## Introduction to Dynamics and Control

*Editor: D. Ronaldo*

Dynamics and control are the fundamentals of mechanical systems with applications in all areas including industrial units, domestic machines, medical devices, robotics systems, aerospace systems, etc. It focuses on fundamental dynamics modelling and feedback control theories of mechanisms, machines, robots and other mechanical systems. This book covers dynamics and controls of engineering systems, with particular focus on mechanical engineering systems.

Print ISBN: 978-1-68251-223-4 | \$150 | 2017 | Hardcover



## Algorithms for VLSI Design Automation

*Editor: Brian Johnson*

Very-large-scale integration (VLSI) is the process of creating an integrated circuit (IC) by combining thousands of transistors into a single chip. VLSI is the current level of computer microchip miniaturization and refers to microchips containing in the hundreds of thousands of transistors. This book focuses on the algorithms which are the building blocks of the design automation software which generates the layout of VLSI circuits.

Print ISBN: 978-1-68251-224-1 | \$150 | 2017 | Hardcover

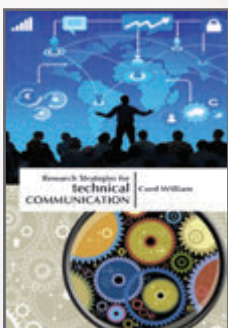


## Vacuum Microelectronics

*Editor: C. Yaan*

The field of vacuum microelectronics has advanced so swiftly that commercial devices are being fabricated, and applications are being developed in displays, wireless communications, spacecraft, and electronics for use in harsh environments. It is a rapidly evolving, interdisciplinary field encompassing electrical engineering, materials science, vacuum engineering, and applied physics. This book provides comprehensive and in-depth coverage of the entire spectrum of vacuum microelectronics.

Print ISBN: 978-1-68251-225-8 | \$150 | 2017 | Hardcover



## Research Strategies for Technical Communication

*Editor: Cord William*

Technical communication is a means to convey scientific, engineering, or other technical information. Individuals in a variety of contexts and with varied professional credentials engage in technical communication. The book offers succinct and open yet thorough coverage of audience and purpose, research, style, and document design, and strategies for designing all of the major document types. This cutting-edge text outlines foundational principles of a range of methodologies in technical communication, reflecting on the process of importing and employing these methodologies into technical communication research.

Print ISBN: 978-1-68251-226-5 | \$150 | 2017 | Hardcover



## Electronic Amplifiers and Circuit Design: Art and Practice

*Editor: Anton Miller*

Electronic amplifier is an electronic component that can increase the power of a signal. An amplifier functions by taking power from a power supply and controlling the output to match the input signal shape but with a larger amplitude. The process of circuit design can cover systems ranging from complex electronic systems all the way down to the individual transistors within an integrated circuit. This book focuses on types of amplifiers and design factors that affect bandwidth and frequency response, types of coupling including electronic networks and transformers, impedance considerations.

Print ISBN: 978-1-68251-227-2 | \$150 | 2017 | Hardcover



## Logistics in Manufacturing

*Editor: Patrick Davis*

Manufacturing has been one of the key areas that support and influence a nation's economy since the eighteenth century in order to deal with issues of logistics and supply chain management, effectively and efficiently. This comprehensive overview of logistics provides a conceptual framework for understanding the logistics system, the integration of its basic elements, and its relationship to the overall firm. This book deals with logistics in manufacturing.

Print ISBN: 978-1-68251-228-9 | \$150 | 2017 | Hardcover



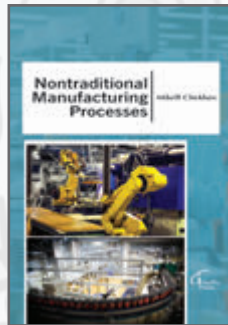


## Enterprise Networks and Logistics for Agile Manufacturing

*Editor: W. Yang*

With increasingly decentralized manufacturing systems and outsourcing, more robust and practical approaches and systems are needed to support agile manufacturing operations. Agile manufacturing is a term applied to an organization that has created the processes, tools, and training to enable it to respond quickly to customer needs and market changes while still controlling costs and quality. This book presents both a broad-based review of the key areas of research in agile manufacturing, and an in-depth treatment of individual methodologies and systems from enterprise networks and logistics to supply chain scheduling and management.

Print ISBN: 978-1-68251-229-6 | \$150 | 2017 | Hardcover

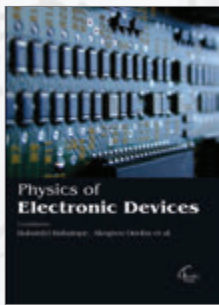


## Nontraditional Manufacturing Processes

*Editor: Mikell Chekhov*

Manufacturing processes are the steps through which raw materials are transformed into a final product. The manufacturing process begins with the creation of the materials from which the design is made. This book provides a convenient, single source of information on advanced machining, material forming, and joining processes. It describes available technologies that use tools, such as high velocity material jets, pulsed magnetic fields, light beams, electrochemical reactions, and more.

Print ISBN: 978-1-68251-230-2 | \$150 | 2017 | Hardcover

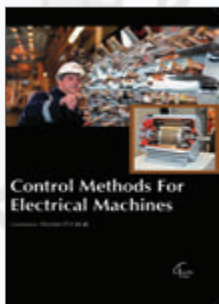


## Physics of Electronic Devices

*Contributors: Babaniyi Babatope, Akogwu Onobu et al.*

The word electronics is derived from electron mechanics, which means to study the behavior of an electron under different conditions of applied electric field. The device which controls the flow of electrons is called electronic device. These devices are the main building blocks of electronic circuits. Electronic devices are playing a major role in everyday life. The various electronic devices we use in everyday life include mobile phones, digital camera, ATM, pen drive television and much more. This book covers the physical phenomena involved in the operation of semiconductor devices, and shows how the phenomena determine the properties of specific devices such as transistors, light emitting diodes and semiconductor lasers.

Print ISBN: 9781682510339 | \$170 | Pub Year: 2016 | Hardcover



## Control Methods for Electrical Machines

*Contributors: Nicolae D.V et al.*

Electrical machines is synonymous with electric motor or electric generator, all of which are electromechanical energy converters, converting electricity to mechanical power or mechanical power to electricity. This book provide an extraordinarily range of technologies found in today's state of the-art industrial electrical systems and the problem of how to control a number of different machines, whose interactions and outputs must be coordinated, is addressed and solutions are presented.

Print ISBN: 9781682510742 | \$170 | Pub Year: 2016 | Hardcover



## Principles and Techniques of Bioinstrumentation

*Contributors: Salmah B. Karman, S. Zaleha M. Diah et al.*

Bioinstrumentation is the use of bioelectronics instruments for the recording or transmission of physiological information. Biomedical devices are an amalgamation of biology, sensors, interface electronics, microcontrollers, and computer programming, and require the combination of several traditional disciplines including biology, optics, mechanics, mathematics, electronics, chemistry, and computer science. Bioinstrumentation teams gather engineers that design, fabricate, test, and manufacture advanced medical instruments and implant devices into a single, more productive unit. The field of bioinstrumentation has seemingly endless possibilities because of its fusion of different fields for the common purpose of developing new and exciting ways of managing and treating disease and disabilities. This book covers the basic principles in several areas including digital electronic systems, control systems, detection systems, and material biocompatibility.

Print ISBN: 9781682510100 | \$170 | Pub Year: 2016 | Hardcover



### Fermentation Technology

*Contributors: Adam A. Banach, Beng Guat Ooi et al.*

Fermentation technology is a field which involves the use of microorganisms and enzymes for production of compounds which have application in the energy, material, pharmaceutical, chemical and the food industry. Though fermentation processes are used for generations for the requirement for sustainable production of materials and energy is demanding creation and advancement of novel fermentation processes. Through fermentation, we can produce enzymes for industrial purposes. Process of Fermentation includes the use of microorganisms, like yeast and bacteria for the production of enzymes. Various industries depend on enzymes for the production of their enzyme dependent products. Industries which are used for enzymes generated by fermentation are the wine making, brewing, cheese making and baking. This book envisages the processes of fermentation technology and its industrial applications.

Print ISBN: 9781682510179 | \$170 | Pub Year: 2016 | Hardcover

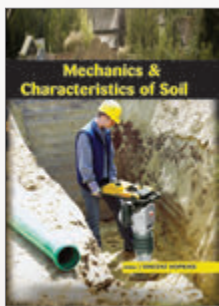


### Solid State Devices and Electronics

*Contributors: Sergey G. Lebedev et al.*

Solid-state electronics are those circuits or devices built entirely from solid materials and in which the electrons, or other charge carriers, are confined entirely within the solid material. Common solid-state devices include transistors, microprocessor chips, and RAM. In a solid-state component, the electric current is confined to solid elements and compounds engineered specifically to switch and amplify it. Current flow can be understood in two forms: as negatively charged electrons, and as positively charged electron deficiencies called holes. This book deals with the physics behind the operation of semiconductor devices and show how these principles are applied in several different types of semiconductor devices.

Print ISBN: 9781682510254 | \$170 | Pub Year: 2016 | Hardcover



### Mechanics & Characteristics of Soil

*Contributors: Vincent Hopkins et al.*

Soil mechanics is a branch of engineering mechanics that describes the behavior of soils and differs from fluid mechanics and solid mechanics in the sense that soils consist of a heterogeneous mixture of fluids and particles but soil may also contain organic solids, liquids, and gasses and other matter. This book involves the study of soil mechanics formation by weathering and its transportation characteristics by wind and water. Whereas the formation process determines many of the physical properties of soil, such as structure, composition and relative density.

Print ISBN: 9781682510803 | \$170 | Pub Year: 2016 | Hardcover



### Geotechnical Earthquake Engineering & Seismology

*Contributors: Silvia Garcia et al.*

Earthquake Engineering can be defined as the branch of engineering devoted to mitigating earthquake hazards, it covers the investigation and solution of the problems created by damaging earthquakes, and consequently the work involved in the practical application of these solutions. The main aim of this book is to collect the data which is useful in understanding the state-of-art technology and its application to new topics.

Print ISBN: 9781682511473 | \$170 | Pub Year: 2016 | Hardcover



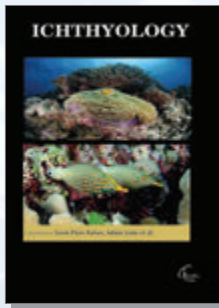
### Soil Mechanics & Foundation Engineering

*Contributors: Mohd Ahmed, Mahmoud H. Mohamed et al.*

Soil mechanics is used to analyze the deformations of and flow of fluids within natural and manmade structures that are supported on or made of soil, or structures that are buried in soils. This book discusses about the fundamental principle and foundation application of soil mechanics is needed to predict the behavior and performance of soil as a construction materials or as a supporting medium for engineering structure.

Print ISBN: 9781682510797 | \$170 | Pub Year: 2016 | Hardcover



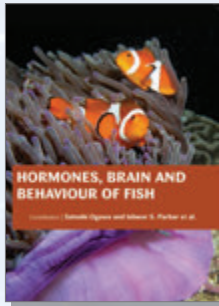


## Ichthyology

**Contributors:** *Izeni Pires Farias, Adam Leão et al.*

Ichthyology also known as fisheries science, is the branch of biology devoted to the study of fish and it is also the study of fish receives its origins from human's desire to feed, clothe, and equip themselves with useful implements. This book provides a wealth of information on the strategies that fish adopt with respect to waters with markedly different physical and chemical characteristics.

Print ISBN: 9781682510636 | \$180 | Pub Year: 2016 | Hardcover

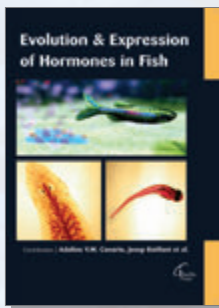


## Hormones, Brain and Behaviour of Fish

**Contributors:** *Satoshi Ogawa, Ishwar S. Parhar et al.*

Fish are herded by the noise and sight of trawl doors moving over the seabed and by the sand clouds they create. Hiding is completely natural behavior for most fish, especially when they are first introduced to their new aquarium. If the fish are fighting, it generally means that they are not a compatible fit to be housed in the same aquarium. Many fish are naturally aggressive and will defend their territory to the death. This book covers the different type of activity and behavior of fish also focuses on the fish brain and hormones structure.

Print ISBN: 9781682511541 | \$170 | Pub Year: 2016 | Hardcover



## Evolution & Expression of Hormones in Fish

**Contributors:** *Adelino V.M. Canario, Josep Rotllant et al.*

Research on the molecular aspects of fish reproduction has progressed swiftly over the past few years. In fish culture the use of hormones is mainly limited to the field of reproduction, and more precisely to induce or synchronize ovulation and stimulate spermination. This book reveals novel variants of reproductive hormones and their receptors, and has shed new light on the mechanisms through which many of these genes can be activated.

Print ISBN: 9781682511558 | \$170 | Pub Year: 2016 | Hardcover

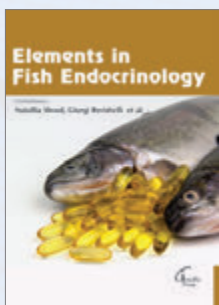


## Assessment & Evaluation in Fishery Culture

**Contributors:** *Marian Adwowa Amu-Mensah, Frederick K. Amu-Mensah et al.*

Fishery culture is the principal form of aquaculture, while other methods may fall under mariculture. It involves the raising fish commercially in tanks or enclosures, usually for food. The purpose of these kinds of structures is to decrease the possibility of many outside factors, such as contaminants and predators, while creating an environment within which the fish will thrive. This book focuses on the evaluation and assessment that are involve in fishery culture.

Print ISBN: 9781682511572 | \$170 | Pub Year: 2016 | Hardcover

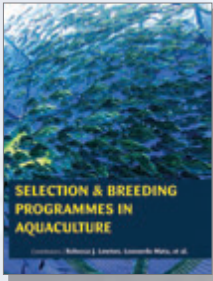


## Elements in Fish Endocrinology

**Contributors:** *Natallia Shved, Giorgi Berishvili et al.*

Endocrinology has considerably increased the knowledge of the mechanisms controlling some physiological functions, this has allowed the identification of sensitive phases in fish in captivity and helps in the management and the process of domestication. This book discusses the intimate physiology of the endocrine system itself and describes the role of hormones in the process of nutrition, osmoregulation, color change, calcium metabolism and reproduction.

Print ISBN: 9781682511565 | \$170 | Pub Year: 2016 | Hardcover



## Selection & Breeding Programmes in Aquaculture

*Contributors: Rebecca J. Lawton, Leonardo Mata et al.*

Aquaculture is the farming of aquatic organisms such as fish, crustaceans, molluscs and aquatic plants, it allows natural populations of fish to reproduce while farmed-raised versions are being used for food and also helps the sustainability of some heavily-demanded fish. This book provides an understanding on a large variety of aquaculture related topics and presents recent research results on the interaction between aquaculture and breeding programs, and includes several case studies all over the world with the aim of improving and performing sustainable aquaculture.

Print ISBN: 9781682511589 | \$170 | Pub Year: 2016 | Hardcover







### Food and Industrial Microbiology

*Contributors: Danièle Sohier, Sonia Pavan et al.*

Food microbiology is the study of the microorganisms that inhabit, create, or contaminate food, including the study of microorganisms causing food spoilage. Food and Industrial Microbiology details the principles involved in microbiological spoilage of foods, micro-organisms of public health significance that cause food-borne illness, food safety and aspects of food preservation. Microbiological testing of foods is considered using current standard methods. The industrial microbiology examines how micro-organisms are obtained, handled and maintained in industry and discusses the application of genetically modified micro-organisms. Fermentation modes and kinetic models are discussed.

Print ISBN: 9781682510070 | \$170 | Pub Year: 2016 | Hardcover

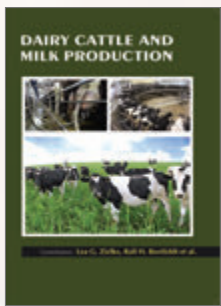


### Chemical & Microbiological Analysis of Milk & Dairy Food Products

*Contributors: Neethu Maria Jose, Craig R. Bunt et al.*

A dairy product or milk product is food produced from the milk of mammals. Dairy products are usually high energy-yielding food products. A production plant for the processing of milk is called a dairy or a dairy factory. This book gives a knowledge about the numerous methods of chemical and microbiological analysis on dairy food products.

Print ISBN: 9781682511251 | \$170 | Pub Year: 2016 | Hardcover

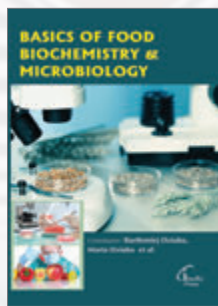


### Dairy Cattle and Milk Production

*Contributors: Lea G. Zielke, Ralf H. Bortfeldt et al.*

Dairy is a business enterprise established for the harvesting or processing of animal milk mostly from cows or goats, but also from buffaloes, sheep, horses or camels – for human consumption. This book is devoted to more specific consideration of areas with aspects of genetics factors and the molecular and cellular mechanisms, animal management, and also focuses on the milk production techniques.

Print ISBN: 9781682512012 | \$170 | Pub Year: 2016 | Hardcover

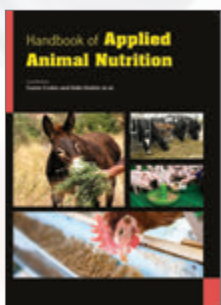


### Basics of Food Biochemistry & Microbiology

*Contributors: Bartłomiej Dziuba, Marta Dziuba et al.*

Food microbiology is the study of the microorganisms that inhabit, create, or contaminate food, including the study of microorganisms causing food spoilage. This book covers research on the effects of handling, storage, and processing on the biochemical aspects of food.

Print ISBN: 9781682511282 | \$170 | Pub Year: 2016 | Hardcover

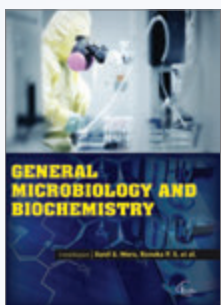


### Handbook of Applied Animal Nutrition

*Contributors: Cazim Crnkic, Aida Hodzic et al.*

Animal nutrition focuses on the dietary needs of domesticated animals, primarily those in agriculture and food production. Other micronutrients include antioxidants and phytochemicals which are said to influence some body systems. This book provides a vital interest to all involved in animal nutrition and the animal production industry.

Print ISBN: 9781682512029 | \$190 | Pub Year: 2016 | Hardcover

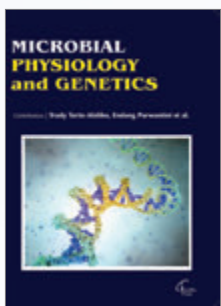


## General Microbiology and Biochemistry

*Contributors: Sunil S. More, Renuka P. S. et al.*

Biology is the study of living organisms. Biology includes many sub-disciplines, such as microbiology and biochemistry. Microbiology studies microorganisms, while biochemistry studies the building blocks that compose organisms. Although distinct areas of biology, the two share many attributes. This book covers topics in biochemistry and microbiology of present or potential practical applications.

Print ISBN: 9781682510056 | \$170 | Pub Year: 2016 | Hardcover



## Microbial Physiology and Genetics

*Contributors: Trudy Torto-Alalibo, Endang Purwantini et al.*

Microbial physiology is the study of microbial structure and function, in particular, how microbial activity responds to changes in the environment. It is therefore the key to controlling detrimental aspects of microbes, and to exploiting them for the good of the human race. This book includes a review of the structure and biosynthesis of bacterial and fungal cells, their key metabolic processes and their quest for food. You will also study microbial growth, genome organization and the structure and mechanisms of DNA transfer.

Print ISBN: 9781682510063 | \$170 | Pub Year: 2016 | Hardcover



## Food and Industrial Microbiology

*Contributors: Danièle Sohier, Sonia Pavan et al.*

Food microbiology is the study of the microorganisms that inhabit, create, or contaminate food, including the study of microorganisms causing food spoilage. Food and Industrial Microbiology details the principles involved in microbiological spoilage of foods, micro-organisms of public health significance that cause food-borne illness, food safety and aspects of food preservation. Microbiological testing of foods is considered using current standard methods. The industrial microbiology examines how micro-organisms are obtained, handled and maintained in industry and discusses the application of genetically modified micro-organisms. Fermentation modes and kinetic models are discussed.

Print ISBN: 9781682510070 | \$170 | Pub Year: 2016 | Hardcover



## Entomology and Parasitology

*Contributors: A. Verónica Trigo, Néstor Centeno et al.*

Entomology is the scientific study of insects. Like several of the other fields that are categorized within zoology, entomology is a taxon-based category; any form of scientific study in which there is a focus on insect related inquiries is entomology. Entomology therefore includes a cross-section of topics as diverse as molecular genetics, behavior, biomechanics, biochemistry etc. Parasitology is the study of parasites, their hosts, and the relationship between them. The study of these diverse organisms means that the subject is often broken up into simpler, more focused units, which use common techniques, even if they are not studying the same organisms or diseases. This book is designed to acquaint with the knowledge of Insect's taxonomy, evolution and success with a link to the common diseases affecting organisms.

Print ISBN: 9781682510117 | \$170 | Pub Year: 2016 | Hardcover



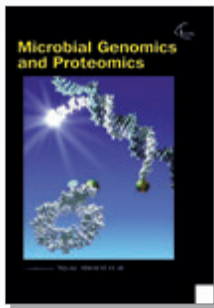
## Bacteriology

*Contributors: Shingo Noguchi, Hiroshi Mukae et al.*

Bacteria constitute a large domain of prokaryotic microorganisms. Typically a few micrometres in length, bacteria have a number of shapes, ranging from spheres to rods and spirals. Bacteria were among the first life forms to appear on Earth, and are present in most of its habitats. Bacteria inhabit soil, water, acidic hot springs, radioactive waste, and the deep portions of Earth's crust. The microbiological science which includes the study of bacteria is known as Bacteriology. This book covers fundamental processes in bacteria, archaea and their viruses, and the molecular mechanisms by which they interact with each other and with their hosts and their environments.

Print ISBN: 9781682510124 | \$170 | Pub Year: 2016 | Hardcover





## Microbial Genomics And Proteomics

*Contributors: Niyaz Ahmed et al.*

The increasing number of available genomes for fungi and bacteria shows that the genetic potential for decomposition of organic matter is widespread among taxonomically diverse microbial taxa, while expression studies document the importance of the regulation of expression in decomposition efficiency. Importantly, high-throughput methods of nucleic acid analysis used for the analysis of metagenomes and metatranscriptomes indicate the high diversity of decomposer communities in natural habitats and their taxonomic composition. Today, the metaproteomics of natural habitats is of interest. This book explores the products of decomposition and the accumulation of information on the genomes of environmentally relevant microorganisms, advanced methods in microbial ecophysiology.

Print ISBN: 9781682510155 | \$170 | Pub Year: 2016 | Hardcover

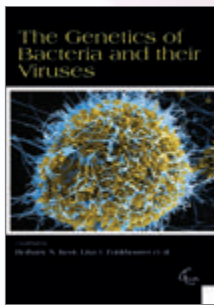


## Cellular Microbiology

*Contributors: Chihiro Aikawa, Fumito Maruyama et al.*

Cellular microbiology attempts to use pathogenic microbes as tools for cell-biology research, and to employ cell-biology methods to understand the pathogenicity of microbes. Toxins and virulence factors from microbes have been used for decades to influence processes in eukaryotic cells and to study them. Recently, the field of cellular microbiology has been expanded to incorporate investigation of the cell biology of microbes themselves. This book focuses on host-microbe interactions from a molecular, biochemical, cell biological or immunological perspective as well as studies that address microbial pathogenic evolution and adaptation.

Print ISBN: 9781682510148 | \$170 | Pub Year: 2016 | Hardcover

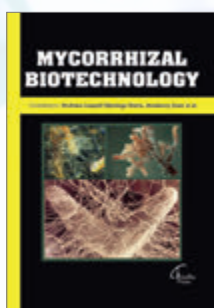


## The Genetics of Bacteria and Their Viruses

*Contributors: Bethany N. Kent, Lisa J. Funkhouser et al.*

Bacterial genetics studies the mechanisms of heritable information in bacteria, their chromosomes, plasmids, transposons and phages. Techniques that have enabled this discipline are culture in defined media, replica plating, mutagenesis, transformation, conjugation and transduction. Many human infections are caused by either bacteria or viruses. Bacteria are tiny single-celled organisms, thought by some researchers to be related to plants. They are among the most successful life forms on the planet, and range in habitat from ice slopes to deserts. Bacteria can be beneficial – for example, gut bacteria help us to digest food – but some are responsible for a range of infections. A virus is an even smaller micro-organism that can only reproduce inside a host's living cell. It is very difficult to kill a virus. That's why some of the most serious communicable diseases known to medical science are viral in origin.

Print ISBN: 9781682510162 | \$170 | Pub Year: 2016 | Hardcover

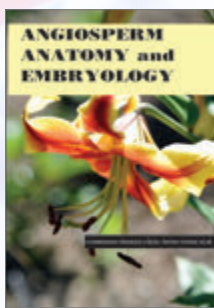


## Mycorrhizal Biotechnology

*Contributors: Ibrahima Léopold Djitiningo Diatta, Aboubacry Kane et al.*

Mycorrhizal is a symbiotic association composed of a fungus and roots of a vascular plant. In a mycorrhizal association, the fungus colonizes the host plant's roots, either intracellularly as in arbuscular mycorrhizal fungi, or extracellularly as in ectomycorrhizal fungi. This book emphasizes the biotechnological application of mycorrhizae to promote the production of food while maintaining ecologically and economically sustainable production systems.

Print ISBN: 9781682511930 | \$180 | Pub Year: 2016 | Hardcover

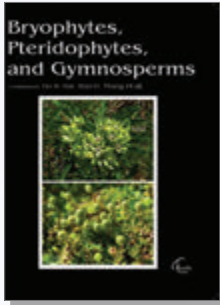


## Angiosperm Anatomy and Embryology

*Contributors: Barbara J Bliss, Stefan Wanke et al.*

Angiosperms are seed-producing plants like the gymnosperms and can be distinguished from the gymnosperms by characteristics including flowers, endosperm within the seeds, and the production of fruits that contain the seeds. This book is intended to demonstrate how embryological characteristics can be practically applied to systematic and evolutionary studies to show which bryological characters are most likely to be useful for the studies at a given taxonomic level.

Print ISBN: 9781682510438 | \$170 | Pub Year: 2016 | Hardcover



## Bryophytes, Pteridophytes, and Gymnosperms

*Contributors: Do N. Dai, Tran D. Thang et al.*

Bryophytes and Pteridophytes are two large groups of spore producing land plants. Bryophytes are a group of small, mostly non-vascular, land plants that share a unique life cycle having a dominant gametophyte. The spore producing body called sporophyte is permanently attached to the sexual body called gametophyte. The gametophytic bodies of bryophytes can be either thalloid or leafy. The pteridophytes, which include the ferns and fern allies, are a group of vascular land plants with a dominant sporophytic body. The gametophytic body, the prothallus, is minute, often heart-shaped and free living. Like bryophytes, members of pteridophytic group do not produce seeds but only spores. Angiosperms are seed-producing plants like the gymnosperms and can be distinguished from the gymnosperms by characteristics including flowers, endosperm within the seeds, and the production of fruits that contain the seeds. The book details the reproductive system and physical characteristics of bryophytes, pteridophytes, and gymnosperms.

Print ISBN: 9781682510421 | \$170 | Pub Year: 2016 | Hardcover

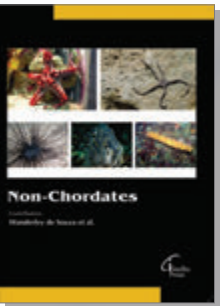


## Angiosperm Taxonomy and Gymnosperms

*Contributors: Wafaa Kamal Taia et al.*

Taxonomy is the science of naming, describing and classifying organisms and includes all plants, animals and micro-organisms of the world. Taxonomy identifies and enumerates the components of biological diversity providing basic knowledge underpinning management and implementation of the convention on biological diversity. Angiosperms are a taxonomic class of plants in which the mature seed is surrounded by the ovule. Living gymnosperms are a diverse group of plants, most of which bear their sporangia in large, prominent strobili or cones. These strobili are similar to those of lycopsids and horsetails. Strobili consist of a shortened stem with several modified leaves that bear sporangia. Like all seed plants, gymnosperms are heterosporous. The sporangia that generate the male microspores and female megaspores are usually borne on separate cones. This book deals with the principles of angiosperm taxonomy and gymnosperms.

Print ISBN: 9781682510445 | \$170 | Pub Year: 2016 | Hardcover



## Non-Chordates

*Contributors: Wanderley de Souza et al.*

There are approximately 30 animal phyla currently recognized. The last major group of the animal kingdom is known as phylum chordata. Chordates are animals having a cord, i.e., notochord. The animals belonging to all other phyla of the animal kingdom are often termed 'the non-chordates' or 'the invertebrates' since they have no notochord or backbone in their body structure. This book focuses on the evolutionary relationships of non-chordate animals.

Print ISBN: 9781682510469 | \$170 | Pub Year: 2016 | Hardcover

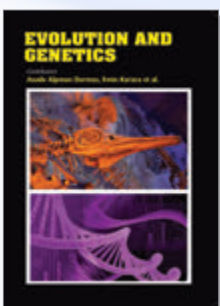


## Chordates

*Contributors: Mehmet Ilyas Cosacak, Christos Papadimitriou et al.*

Chordates are animals with backbones. Animal groups in the chordate phylum include fish, amphibians, reptiles, birds and mammals. Animals with backbones are the most highly evolved groups of animals, the most complex and complicated. They have interior skeletons and have bilateral symmetry. They have more advanced brains. Of the more than 65,000 living species of chordates, about half are bony fish of the class Osteichthyes. The world's largest and fastest animals, the blue whale and peregrine falcon respectively, are chordates, as are humans. This book envisages on the evolutionary genetics and relationships of chordates.

Print ISBN: 9781682510476 | \$170 | Pub Year: 2016 | Hardcover



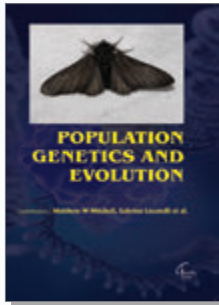
## Evolution and Genetics

*Contributors: Asude Alpman Durmaz, Emin Karaca et al.*

Evolutionary genetics is the broad field of studies that resulted from the integration of genetics and Darwinian evolution. This field attempts to account for evolution in terms of changes in gene and genotype frequencies within populations and the processes that convert the variation with populations into more or less permanent variation between species. This book gives an overview of some principles behind these fundamental areas of biology.

Print ISBN: 9781682510483 | \$170 | Pub Year: 2016 | Hardcover





## Population Genetics and Evolution

*Contributors: Matthew W Mitchell, Sabrina Locatelli et al.*

Population genetics is the study of the distribution and change in frequency of alleles within populations, and as such it sits firmly within the field of evolutionary biology. The main processes of evolution form an integral part of the theory that underpins population genetics. Studies in this branch of biology examine such phenomena as adaptation, speciation, population subdivision, and population structure. This book focuses on the frequency and distribution of genetic variants within populations, and how they fluctuate in response to environmental and other factors – in particular, with regard to their functional and phenotypic effects.

Print ISBN: 9781682510520 | \$170 | Pub Year: 2016 | Hardcover



## Structure and Function of Invertebrates

*Contributors: Xian-De Huang, Hua Zhang et al.*

This book focuses on the molecular and functional features of the invertebrate and their receptors, highlighting both the structure and function of invertebrates. Invertebrates are animals that neither possess nor develop a vertebral column, derived from the notochord. This includes all animals apart from the subphylum Vertebrata. Familiar examples of invertebrates include insects, crabs, lobsters and their kin, snails, clams, octopuses and their kin, starfish, sea-urchins and their kin, and worms. Some of the so-called invertebrates, such as the Chaetognatha, Hemichordata, Tunicata and Cephalochordata are more closely related to the vertebrates than to other invertebrates.

Print ISBN: 9781682510537 | \$170 | Pub Year: 2016 | Hardcover

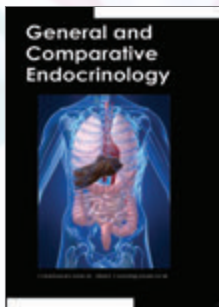


## Quantitative Biology

*Contributors: Kenichi Horisawa et al.*

Quantitative biology study the mathematical and computational methods useful to students of the life sciences. The book emphasizes on the contribution to the understanding of biological systems and the construction of engineered life systems based on quantitative approaches. The book is intended to be useful to students in a wide variety of disciplines, e.g., biochemistry, genetics, cellular biology, microbiology, physiology, systems biology and metabolomics.

Print ISBN: 9781682510506 | \$180 | Pub Year: 2016 | Hardcover



## General and Comparative Endocrinology

*Contributors: John B. Allard, Cunming Duan et al.*

Endocrinology is an area of medicine; some would say a sub-specialty of internal medicine, which deals with the diagnosis and treatment of diseases related to hormones. Endocrinology covers such human functions as the coordination of metabolism, respiration, reproduction, sensory perception, and movement. Endocrinology also focuses on the endocrine glands and tissues that secrete hormones. This book is concerned with the numerous convolutions of vertebrate and invertebrate endocrine systems at the sub-molecular, molecular, cellular and organismal levels of analysis.

Print ISBN: 9781682510513 | \$170 | Pub Year: 2016 | Hardcover



## Biology of Vertebrate Immune System

*Contributors: Feng Zhao, Chao Yan et al.*

The vertebrates possess unique adaptations for immune defense that have apparently evolved gradually over the long evolutionary history of the vertebrate lineage. Molecular diversity is one of the hallmarks of vertebrate immune mechanisms, and molecular analyzes have clearly implicated natural selection as the major factor in promoting molecular diversity and a consequent enhanced immune surveillance. The vertebrate immune system has many specialized cells and molecules that interact in particular ways. This book focuses on the processes of vertebrate immune system.

Print ISBN: 9781682510544 | \$170 | Pub Year: 2016 | Hardcover



## Genes and Differentiation

*Contributors: Mariana Maschietto, Ana C Tahira et al.*

A gene is the basic physical and functional unit of heredity. Every person has two copies of each gene, one inherited from each parent. Most genes are the same in all people, but a small number of genes are slightly different between people. This book presents the effects of gene flow upon genetic differentiation within and between populations generated by mutation and drift.

Print ISBN: 9781682510551 | \$170 | Pub Year: 2016 | Hardcover

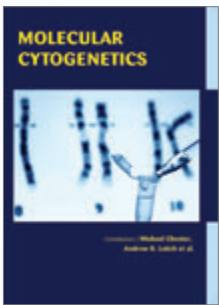


## Biology of Parasitism

*Contributors: Daniel S. Grabner, Faten A. M. M. Mohamed et al.*

Parasitism, in biology/ecology, is a non-mutual symbiotic relationship between species, where one species, the parasite, benefits at the expense of the other, the host. Traditionally parasite referred primarily to organisms visible to the naked eye, or macroparasites. Parasite can include microparasites, which are typically smaller, such as protozoa, viruses, and bacteria. The book focuses on the molecular basis of parasite function and the host/parasite interaction with special emphasis on the most recent and exciting developments in these areas.

Print ISBN: 9781682510582 | \$170 | Pub Year: 2016 | Hardcover



## Molecular Cytogenetics

*Contributors: Michael Chester, Andrew R. Leitch et al.*

Molecular Cytogenetics comprehends all aspects of chromosome biology and the application of molecular cytogenetic techniques in all areas of biology and medicine. It involves the combination of molecular biology and cytogenetics. In general this involves the use of a series of techniques referred to as fluorescence in situ hybridization, in which DNA probes are considered with different colored fluorescent tags to envisage one or more specific regions of the genome.

Print ISBN: 9781682510568 | \$170 | Pub Year: 2016 | Hardcover

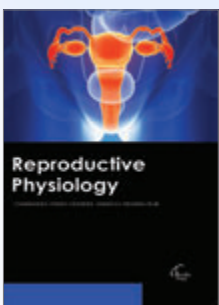


## Microbial Ecology

*Contributors: Cinzia Corinaldesi et al.*

Microbial ecology is the ecology of microorganisms: their relationship with one another and with their environment. It concerns the three major domains of life - Eukaryota, Archaea, and Bacteria as well as viruses. Microorganisms, by their omnipresence, impact the entire biosphere. Microbial life plays a primary role in regulating biogeochemical systems in virtually all of our planet's environments, including some of the most extreme, from frozen environments and acidic lakes, to hydrothermal vents at the bottom of deepest oceans, and some of the most familiar, such as the human small intestine. This book details the study of microbes in the environment and their interactions with each other.

Print ISBN: 9781682510605 | \$170 | Pub Year: 2016 | Hardcover



## Reproductive Physiology

*Contributors: Patrice Humblot, Daniel Le Bourhis et al.*

Reproductive Physiology studies of the maternal female hormone system, including the activities of the hypothalamus, pituitary, and ovaries from puberty through menopause. Effective health programs, research, and policy relating to sexuality, pregnancy, contraception, and the transmission of sexually transmitted infections depends upon knowledge of the structure and function (physiology) of the male and female reproductive systems.

Print ISBN: 9781682510575 | \$170 | Pub Year: 2016 | Hardcover





## Insect Physiology

**Contributors:** Ashley Bear, Ariel Simons et al.

Insects are the most diverse of all organisms on earth. Their general body plan allows for this tremendous diversification in form and also it is made up of three main body regions, the head, thorax and abdomen. It is currently undergoing a revolution with the increased application of molecular biological techniques to investigate the molecular mechanisms underlying the physiological responses to insect cells. This book provides up-to-date reviews on topical subjects of importance to all invertebrate physiologists and neurobiologists and contains increased coverage on the molecular biology of insect physiology.

Print ISBN: 9781682510629 | \$170 | Pub Year: 2016 | Hardcover



## Metabolic Regulation and Cell Function

**Contributors:** Purin Charoensuksai, Wei Xu et al.

Cell function is a branch of biology that studies cells their physiological properties, their structure, the organelles they contain, interactions with their environment, their life cycle, division, death of cells. This book focuses on the biological implications of newly-discovered functions of cellular thiols, such as glutathione in the first place.

Print ISBN: 9781682510643 | \$170 | Pub Year: 2016 | Hardcover



## Advanced Genetic & DNA Recombinant Technology

**Contributors:** Zhenyu Shi, Anthony G. Wedd et al.

Gene technology encompasses several techniques including marker-assisted breeding, RNAi and genetic modification. A fragment of DNA, containing a single gene or a number of genes, can be inserted into a vector that can be propagated within another cell. A vector is a section of DNA that can incorporate another DNA fragment without losing the capacity for self-replication, and a vector containing an additional DNA fragment is known as a hybrid vector. If the fragment of DNA includes one or more genes the process is referred to as gene cloning or recombinant DNA. This book provides a comprehensive description of the DNA recombinant technology in genetic engineering.

Print ISBN: 9781682511176 | \$180 | Pub Year: 2016 | Hardcover

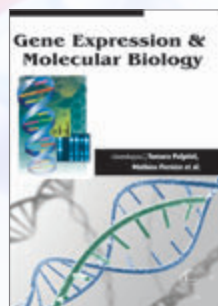


## Molecular Parasitology

**Contributors:** Hugo H. Mejía-Madrid et al.

Parasitology is the study of parasites organisms that can only survive by living on others. Whereas molecular parasitology is the study of parasites and their interactions with their hosts, at the molecular level. Through understanding parasitism at the molecular level, we hope to devise effective remedies for parasitic diseases. This book applies broad concepts and current scientific advances from both molecular biology and biochemistry to the study of parasitic organisms.

Print ISBN: 9781682510650 | \$170 | Pub Year: 2016 | Hardcover

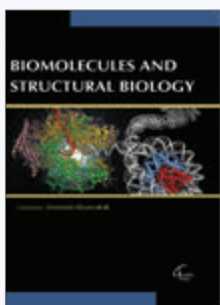


## Gene Expression & Molecular Biology

**Contributors:** Tamara Pulpitel, Mathieu Pernice et al.

Gene expression is the process by which information from a gene is used in the synthesis of a functional gene product. It processes may be modulated, including the transcription, RNA splicing, translation, and post-translational modification of a protein. This book provides an overview of the rationale and general experimental approaches used to examine chemically or disease-mediated alterations in gene expression in mammalian systems.

Print ISBN: 9781682511190 | \$170 | Pub Year: 2016 | Hardcover



### Biomolecules and Structural Biology

*Contributors: Antonietta Baiano et al.*

Biomolecules structure is the intricate folded, three-dimensional shape that is formed by a protein, DNA, or RNA molecule, and that is important to its function. Whereas Structural biology is a branch of molecular biology, biochemistry, and biophysics concerned with the molecular structure of biological macromolecules, especially proteins and nucleic acids, how they acquire the structures they have, and how alterations in their structures affect their function. This book explains how to use coordinate databases and atomic coordinates of biological macromolecules and also develops visualization skills for protein or DNA segments.

Print ISBN: 9781682510674 | \$170 | Pub Year: 2016 | Hardcover



### Enzyme Technology & Biotechnology

*Editor: Aurelia Chandler*

Enzyme is the biological substance or biological macromolecules that are produced by a living organism which acts as a catalyst to bring about a specific biochemical reaction. Enzymes are highly efficient, which can increase reaction rates by 100 million to 10 billion times faster than any normal chemical reaction. This book consists of the principles and practice of the utilization of enzymes in biotechnology and also provides a great deal of information on the potential of enzymes for commercial exploitation.

Print ISBN: 9781682511213 | \$170 | Pub Year: 2016 | Hardcover

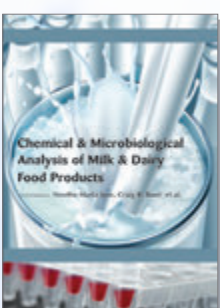


### Laboratory Techniques & Experiments in Biology

*Editor: Aurora Blair*

Laboratory is a facility that provides controlled conditions in which scientific or technological research, experiments, and measurement may be performed. Whereas laboratory techniques are the sum of procedures used on natural sciences such as chemistry, biology, physics in order to conduct an experiment. This book contains a comprehensive treatment of laboratory techniques, including small-scale and some micro scale methods and provides a deep knowledge about biological experiments.

Print ISBN: 9781682511220 | \$170 | Pub Year: 2016 | Hardcover



### Chemical & Microbiological Analysis of Milk & Dairy Food Products

*Contributors: Neethu Maria Jose, Craig R. Bunt et al.*

A dairy product or milk product is food produced from the milk of mammals. Dairy products are usually high energy-yielding food products. A production plant for the processing of milk is called a dairy or a dairy factory. This book gives a knowledge about the numerous methods of chemical and microbiological analysis on dairy food products.

Print ISBN: 9781682511251 | \$170 | Pub Year: 2016 | Hardcover



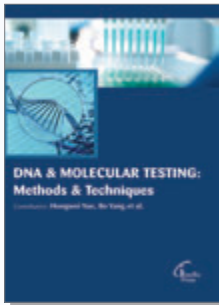
### Cell Biology for Biotechnologists & Microbiologists

*Contributors: Patrik Sahlin et al.*

Cell biology is a branch of biology that studies cells their physiological properties, their structure, the organelles they contain, interactions with their environment, their life cycle, division, death and cell function. This book covers the numerous methods and techniques which are provided by biotechnologist and microbiologists on the area of cell biology.

Print ISBN: 9781682511237 | \$170 | Pub Year: 2016 | Hardcover





## DNA & Molecular Testing: Methods & Techniques

*Contributors: Hongwei Yue, Bo Yang et al.*

DNA testing, allows the genetic diagnosis of vulnerabilities to inherited diseases, and can also be used to determine a child's parentage or in general a person's ancestry or biological relationship between people. The scope of this book is a comprehensive and analytical study of molecular genetics which covers, nearly, all important aspects of DNA and molecular testing.

Print ISBN: 9781682511268 | \$170 | Pub Year: 2016 | Hardcover



## Laboratory Techniques in Microbiology

*Contributors: P.C.Y. Woo, S.K.P. Lau et al.*

Laboratory techniques provides the controlled conditions in which scientific or technological research, experiments, and measurement may be performed. This book deals with general information about work in microbiology laboratory, viz., safety, first aid, different types of apparatus and their assemblies used for various types of reactions, stirring arrangements and microbiological experiments.

Print ISBN: 9781682511244 | \$170 | Pub Year: 2016 | Hardcover



## Models of DNA Sequence Evolution

*Contributors: Jun Wang, Peter D Keightley et al.*

DNA sequence is a succession of letters that indicate the order of nucleotides within a DNA or RNA molecule. Sequences can be read from the biological raw material through DNA sequencing methods. This book gives a collection of DNA sequences and focuses on the area of DNA testing that deals with tracking diseases and birth defects is sometimes called genetic testing.

Print ISBN: 9781682511275 | \$170 | Pub Year: 2016 | Hardcover

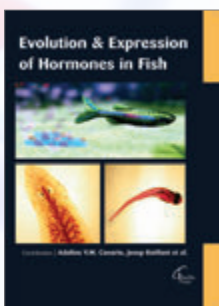


## Basics of Food Biochemistry & Microbiology

*Contributors: Bartłomiej Dziuba, Marta Dziuba et al.*

Food microbiology is the study of the microorganisms that inhabit, create, or contaminate food, including the study of microorganisms causing food spoilage. This book covers research on the effects of handling, storage, and processing on the biochemical aspects of food.

Print ISBN: 9781682511282 | \$170 | Pub Year: 2016 | Hardcover



## Evolution & Expression of Hormones In Fish

*Contributors: Adelino V.M. Canario, Josep Rotllant et al.*

Research on the molecular aspects of fish reproduction has progressed swiftly over the past few years. In fish culture the use of hormones is mainly limited to the field of reproduction, and more precisely to induce or synchronize ovulation and stimulate spermination. This book reveals novel variants of reproductive hormones and their receptors, and has shed new light on the mechanisms through which many of these genes can be activated.

Print ISBN: 9781682511558 | \$170 | Pub Year: 2016 | Hardcover

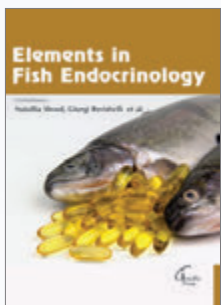


## Computational Genetic Screening

*Contributors: Martin R. Hediger, Luca De Vico et al.*

Genetic screening allows the genetic diagnosis of vulnerabilities to inherited diseases, and can also be used to determine a child's parentage or in general a person's ancestry or biological relationship between people. It searched for abnormal chromosome numbers and mutations that lead to rare, inherited disorders. This book includes the biochemical tests for such gene products as enzymes and other proteins and for microscopic examination of stained or fluorescent chromosomes.

Print ISBN: 9781682511299 | \$170 | Pub Year: 2016 | Hardcover

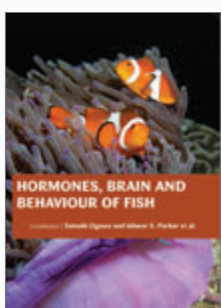


## Elements in Fish Endocrinology

*Contributors: Natallia Shved, Giorgi Berishvili et al.*

Endocrinology has considerably increased the knowledge of the mechanisms controlling some physiological functions, this has allowed the identification of sensitive phases in fish in captivity and helps in the management and the process of domestication. This book discusses the intimate physiology of the endocrine system itself and describes the role of hormones in the process of nutrition, osmoregulation, color change, calcium metabolism and reproduction.

Print ISBN: 9781682511565 | \$170 | Pub Year: 2016 | Hardcover



## Hormones, Brain, and Behaviour of Fish

*Contributors: Satoshi Ogawa, Ishwar S. Parhar et al.*

Fish are herded by the noise and sight of trawl doors moving over the seabed and by the sand clouds they create. Hiding is completely natural behavior for most fish, especially when they are first introduced to their new aquarium. If the fish are fighting, it generally means that they are not a compatible fit to be housed in the same aquarium. Many fish are naturally aggressive and will defend their territory to the death. This book covers the different type of activity and behavior of fish also focus on the fish brain and hormones structure.

Print ISBN: 9781682511541 | \$170 | Pub Year: 2016 | Hardcover

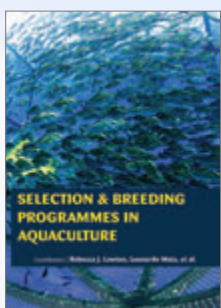


## Assessment & Evaluation in Fishery Culture

*Contributors: Marian Adwowa Amu-Mensah, Frederick K. Amu-Mensah et al.*

Fishery culture is the principal form of aquaculture, while other methods may fall under mariculture. It involves the raising fish commercially in tanks or enclosures, usually for food. The purpose of these kinds of structures is to decrease the possibility of many outside factors, such as contaminants and predators, while creating an environment within which the fish will thrive. This book focuses on the evaluation and assessment that are involve in fishery culture.

Print ISBN: 9781682511572 | \$170 | Pub Year: 2016 | Hardcover



## Selection & Breeding Programmes in Aquaculture

*Contributors: Rebecca J. Lawton, Leonardo Mata et al.*

Aquaculture is the farming of aquatic organisms such as fish, crustaceans, molluscs and aquatic plants, it allows natural populations of fish to reproduce while farmed-raised versions are being used for food and also helps the sustainability of some heavily-demanded fish. This book provides an understanding on a large variety of aquaculture related topics and presents recent research results on the interaction between aquaculture and breeding programs, and includes several case studies all over the world with the aim of improving and performing sustainable aquaculture.

Print ISBN: 9781682511589 | \$170 | Pub Year: 2016 | Hardcover





## **Insect, Pest and Disease Management**

*Editor: Eula Dalton*

Pests and diseases often infiltrate even healthy gardens. It is important to regularly check the plants for spreading diseases or signs of pest damage. This book consist of important pest and diseases practices and management of cash cereals, oilseed, vegetables, fodders, fruits and pulses etc.

**Print ISBN: 9781682511886 | \$170 | Pub Year: 2016 | Hardcover**

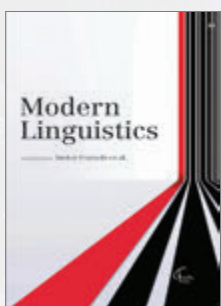


## **Practical Handbook of Microbiology**

*Contributors: Peter Nyasulu, Mabula Kasubi et al.*

Microbiology is often incorrectly classed as the study of germs or of bacteria. It is the study of microscopic organisms, those being unicellular, multicellular, or acellular. It encompasses numerous sub-disciplines including virology, mycology, parasitology, and bacteriology. This book presents basic knowledge about working with microorganisms in a clear and concise form and also provides in-depth information on important aspects of the field from classical microbiology to genomics in one easily accessible volume.

**Print ISBN: 9781682511954 | \$180 | Pub Year: 2016 | Hardcover**

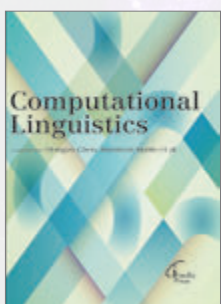


### Modern Linguistics

*Contributors: Helen Forsyth et al.*

Linguistics refers to the scientific study of language. There are three aspects to this study: language form, language meaning, and language in context. Linguistics analyzes human language as a system for relating sounds or signs and meaning. Phonetics studies acoustic and articulatory properties of the production and perception of speech sounds and non-speech sounds. On the other hand, the study of language deals with how languages encode relations between entities, properties, and other aspects of the world to convey, process, and assign meaning, as well as to manage and resolve ambiguity. This book covers general linguistics, phonetics, phonology, syntax and semantics, psycholinguistics and in the history and structure of many individual languages and language families.

Print ISBN: 9781682510001 | \$160 | Pub Year: 2016 | Hardcover



### Computational Linguistics

*Contributors: Hongyu Chen, Bronwen Martin et al.*

Computational linguistics is an interdisciplinary field focused with the statistical or rule-based modeling of natural language from a computational perspective. Usually, computational linguistics was performed by computer scientists who had specialized in the application of computers to the processing of a natural language. This book focuses on computational and mathematical properties of language and the design and analysis of natural language processing systems.

Print ISBN: 9781682510018 | \$160 | Pub Year: 2016 | Hardcover

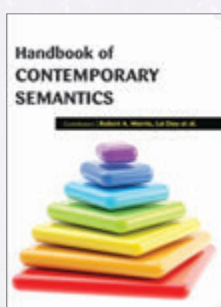


### Computational Morphology

*Contributors: Iris Berent, Amanda Dupuis et al.*

This book presents an integrated set of techniques for the rigorous description of morphological phenomena in English and similar languages. By taking account of all the facets of morphological analysis, it provides a linguistically general and computationally practical dictionary system for use within an English parsing program.

Print ISBN: 9781682510049 | \$160 | Pub Year: 2016 | Hardcover

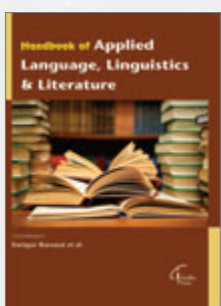


### Handbook of Contemporary Semantics

*Contributors: Robert A. Morris, Lei Dou et al.*

Semantics refers to the study of meaning. It focuses on the relation between signifiers, like words, phrases, signs, and symbols, and what they stand for; their denotation. Linguistic semantics is the study of meaning that is used for understanding human expression through language. Other forms of semantics include the semantics of programming languages, formal logics, and semiotics. This book provides a comprehensive introduction to contemporary theoretical and computational semantics.

Print ISBN: 9781682510025 | \$170 | Pub Year: 2016 | Hardcover



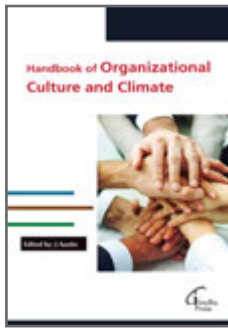
### Handbook of Applied Language, Linguistics & Literature

*Contributors: Enrique Burunat et al.*

Applied linguistics is a particular field of linguistic exploration that not only studies linguistics in a theoretical manner, but also examines how language and literature have an actual impact on society and on people's lives. It is an interdisciplinary field of linguistics that identifies, investigates, and offers solutions to language-related real-life problems. This book covers with a general overview that considers the origins of language, frames the discipline within its historical context, and looks at how linguists acquire new data.

Print ISBN: 9781682511480 | \$170 | Pub Year: 2016 | Hardcover





## Handbook of Organizational Culture and Climate

*Editor: J Austin*

Organizational Culture is one of the most important construct in management research. This investigative book elaborates the impact of organizational culture on organizational performance. Providing a comprehensive overview of current research, theory and practice in this expanding field, this book reveals how examining climate and culture together can advance understanding of the behavior of individuals within organizations, as well as overall organizational performance in different areas such as financial planning, marketing, and strategy formulation.

Print ISBN: 978-1-68251-564-8 | \$155 | 2019 | Hardcover

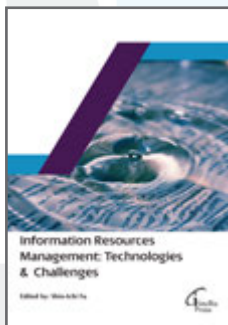


## Group Communication: Theory and Research

*Editor: Marcelo K*

Groups and teams are an important part of our daily lives. They are important to our personal and professional success. Group communication can have effective results in case of marketing, where the communication is vital for selling and marketing products and product launches etc. Offering a practical introduction to the theory and practice of group communication, with an emphasis on real world applications to develop awareness, understanding, and skills to effectively participate as a productive group member; this volume covers studies investigated the impact of inclusive leadership on employee voice behavior and team performance through caring ethical climate.

Print ISBN: 978-1-68251-565-5 | \$150 | 2019 | Hardcover

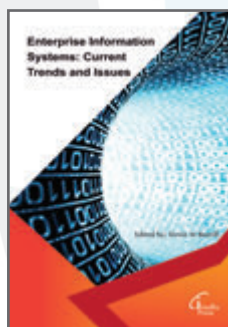


## Information Resources Management: Technologies & Challenges

*Editor: Shin-Ichi Fu*

However, the acceptance of the IRM concept, and the translation of the concept into the practical reality of systems, has as much to do with individual information attitudes, expectations and abilities as it have with technology. Focusing on the implications innovative technologies have on the managerial and organizational aspects of information resource management, this book, featuring the latest research and applied IT practices, is a valuable source in support of teaching and research agendas for students and practitioners with an indispensable and informative reference source.

Print ISBN: 978-1-68251-566-2 | \$145 | 2019 | Hardcover



## Enterprise Information Systems: Current Trends and Issues

*Editor: Devin M Burrill*

Information is essential for the endurance of a financial organization in the global and competitive market. This book will introduce information systems and different types of information systems and their roles in organizations. Contemporary information technologies make it possible for companies to create information systems for effective communication and mutual understanding among staff members, as well as to support the decision making process at all levels of management. The book contains the examples and analysis of the current practices of Enterprise Information Systems (EIS) development and implementation in companies.

Print ISBN: 978-1-68251-567-9 | \$145 | 2019 | Hardcover

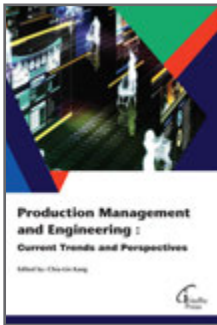


## Organizational Developments through Enterprise Information Systems

*Editor: Steffen Dawid*

This book focuses on the role of information (or data) in contemporary change efforts, and the impact that technology has had on the practice of OD over the past decade. It provides a comprehensive assessment of the latest developments in enterprise information systems research, including development, design, and emerging methodologies Addressing the field of enterprise systems, covering progressive technologies, leading theories, and advanced applications, the book serves as a valuable guide to researchers, scholars, and professionals.

Print ISBN: 978-1-68251-568-6 | \$145 | 2019 | Hardcover

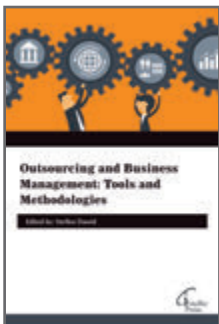


## Production Management and Engineering: Current Trends and Perspectives

*Editor: Chia-Lin Kang*

Maintaining and improving the competitive edge of an enterprise requires continuous improvement in all areas of its activities. In order that the anticipated effects are actually attained, the improvement line should be consistent with the strategy adopted by the business. This book is intended to provide theoretical and application-oriented research developments in all areas of production engineering and production management to a broad audience of academics and practitioners. In order to bridge the gap between theory and practice, applications based on advanced theory and case studies are given.

Print ISBN: 978-1-68251-569-3 | \$145 | 2019 | Hardcover

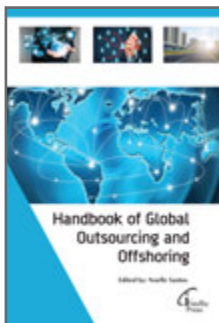


## Outsourcing and Business Management: Tools and Methodologies

*Editor: Steffen Dawid*

Outsourcing has become an important business tool in which one organization provides services to another organization that could also be or usually have been provided in-house. This book uses tools and techniques from a variety of disciplines to show how to plan, implement and manage services outsourcing arrangements successfully. The book combines both research and practical examples to explore how this can be done successfully.

Print ISBN: 978-1-68251-570-9 | \$145 | 2019 | Hardcover

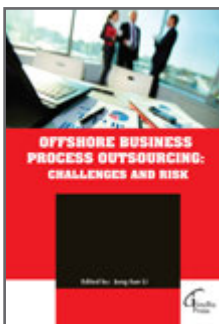


## Handbook of Global Outsourcing and Offshoring

*Editor: Noelle Santos*

Offshoring services has evolved from mainly IT services towards business process services and from low end to higher value added services and more knowledge based services such as research and analytics. The book is intended to analyze the basic facts and trends surrounding the offshoring and outsourcing phenomenon; contains the studies that analyze the causes and consequences of this phenomenon from the perspective of professional service firm. It attempts to understand the genesis and basic drivers behind offshoring and outsourcing, including with market trends, the prospects for growth, and the operational models followed in offshoring and outsourcing.

Print ISBN: 978-1-68251-571-6 | \$155 | 2019 | Hardcover



## Offshore Business Process Outsourcing: Challenges and Risk

*Editor: Jong-Sun Li*

Globalization and outsourcing are words very often used in everyday language and usually associated to the communication and transport and logistics development that changes the current world into a global village. This book considers risk management models from a holistic perspective to manage offshore software development risk, integrated into early stages of development. It also sheds light on how to trace and control these risks already during early requirements engineering activities.

Print ISBN: 978-1-68251-572-3 | \$145 | 2019 | Hardcover



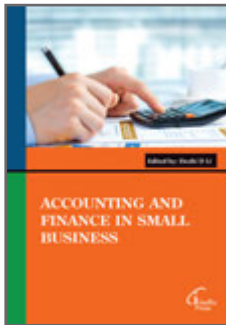
## Data Mining Techniques: For Marketing and Sales

*Editor: N L Austin*

There is an increasing realization that effective marketing and sales management can be done only based on a true understanding of the data mining techniques. Under these conditions, data mining tools can help uncover the hidden knowledge and understand customer better, while a systematic knowledge management effort can channel the knowledge into effective marketing strategies. This book covers innovative applications as well as existing gap and less considered area and determines the future works for researchers.

Print ISBN: 978-1-68251-573-0 | \$145 | 2019 | Hardcover





## Accounting and Finance in Small Business

*Editor: Dezhi D Li*

Small- and medium-sized enterprises (SMEs) play an important role in entrepreneurship and job generation. This book is intended to examine and evaluate the current status of adopting and implementing the accounting system and practices of Small and Medium Enterprises (SMEs) as well as to analyze the extent to which accounting information is being used in measuring financial performance by SMEs with limitations. This book will be of valuable for accountant firms, SMEs, researchers and also to the company involved in service quality.

Print ISBN: 978-1-68251-574-7 | \$145 | 2019 | Hardcover

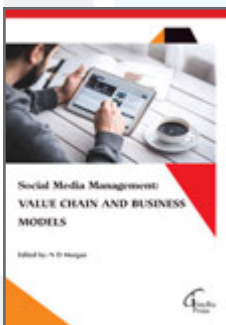


## Social Media Strategy: Tools for Professionals and Organizations

*Editor: Justin Levin*

Social media has enabled organisations to establish a stronger relationship with the community of reference, in order to exploit the network effect and harness collective intelligence. This book provides a systematic overview of literature regarding social media strategy, governance and policy. The goal of this book is to educate business owners, marketing practitioners, students, as well as marketing researchers in understanding the use of social media and how it is beneficial for their marketing plan.

Print ISBN: 978-1-68251-575-4 | \$145 | 2019 | Hardcover

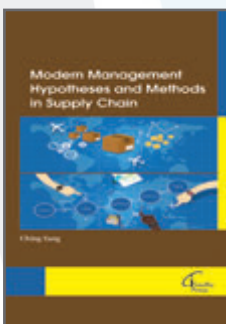


## Social Media Management: Value Chain and Business Models

*Editor: N D Morgan*

Social media as a medium of promotion contributes, through its immediacy, to a healthy and direct relation between brands and their public in an online environment. This book will enable readers to gain a clear insight into how the luxury goods market operates and amongst other things, focuses on: recent internet and social media strategies adopted by luxury companies and their brands. An appealing guide to advanced graduate students, interdisciplinary researchers, academicians, professionals, practitioners, scientists, executive managers, and consultants of marketing and CRM in profit and non-profit organizations.

Print ISBN: 978-1-68251-576-1 | \$145 | 2019 | Hardcover

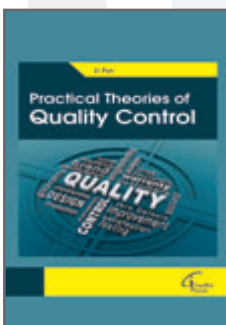


## Modern Management Hypotheses and Methods in Supply Chain

*Editor: Ching Yang*

Supply chains are gaining vital importance to the competitiveness of many organizations and businesses. This book covers contemporary methodologies and concepts as well as experiences and applications in the field of supply chains, which may give valuable material for new research and to those connected with and outlying to the field of supply chains and its management. This book will appeal a comprehensive tool for researchers, graduate students and practitioners by integrating every aspect of management hypotheses into whole supply chain functions such as procurement, warehousing, manufacturing, transportation and disposal.

Print ISBN: 978-1-68251-349-1 | \$145 | 2018 | Hardcover



## Practical Theories of Quality Control

*Editor: Li Pan*

Quality control has a developing importance in every field of life. The quality control process in a product or service is used to assurance a certain level of quality. It might include whatever actions a business deems necessary to provide for the control and verification of certain characteristics of a product or service. This book will provide useful and practical information on quality control for students of industrial engineering at the advanced undergraduate, or as a reference for researchers in related fields seeking a concise treatment of the key concepts of quality control.

Print ISBN: 978-1-68251-350-7 | \$150 | 2018 | Hardcover



## Trends and Issues in Econometrics and Financial Management

*Editor: Akira Hiratsuka*

The relationships of economic theories are usually expressed in mathematical forms and combined with empirical economics. This work aims to present the emphasis on the behavioral issues in econometrics, financial management, quality control and optimization. The text points to a coverage of the latest research techniques and findings relating to the econometric analysis of financial markets. This book will be of immense interest to students, researchers as well as practitioners to deal with the complexities of economic data and to test the predictions of economic theories.

Print ISBN: 978-1-68251-351-4 | \$150 | 2018 | Hardcover



## Methods in Operations Research and Systems Analysis

*Editor: Idaku Birant*

The science of man-machine operating systems, which includes operations research and systems analysis, has achieved a substantial body of theory and application over the last 40 years. This book illustrates applications of systems analysis and operations research in public and private sector decision making, with particular emphasis on the research aspects and practical nature. This Book will be of interest to students and researchers involved in the study or working within, government, industry, transportation, health, and many others field characterized by complex activity.

Print ISBN: 978-1-68251-352-1 | \$150 | 2018 | Hardcover

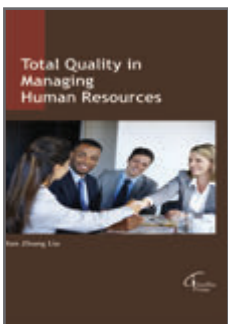


## Operations Research and Systems Optimization Techniques

*Editor: Edson Nascimento*

Operations research is the application of scientific methods, techniques, and tools for solving problems involving the operations of a system in order to provide those in control of the system with optimum solutions to problems. This work provides an overview of operations research, its approach to solving problems, and some examples of successful applications. From the standpoint of a program manager, operations research is a tool that can do a great deal to improve productivity, assist in decision making, and optimize solutions.

Print ISBN: 978-1-68251-353-8 | \$145 | 2018 | Hardcover

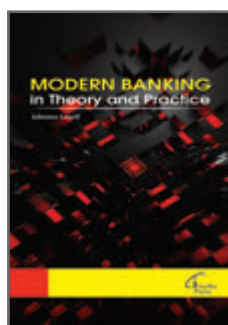


## Total Quality in Managing Human Resources

*Editor: Yan Zhang Liu*

Total quality management (TQM), the preferred approach to achieving total quality, is no longer the sole concern of quality engineers, product designers, process engineers and other specialists. Even the human resource management (HRM) function has an important role to play in developing quality across the entire organization. This guide aims to investigate the impact of human resource management (HRM) practices on the implementation of total quality management (TQM) practices, on the one hand, and to investigate the impacts of HRM and TQM practices on the organizational quality performance, on the other.

Print ISBN: 978-1-68251-354-5 | \$150 | 2018 | Hardcover



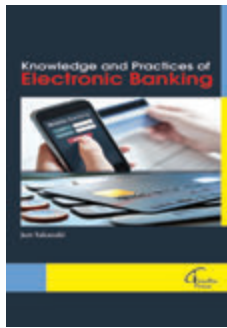
## Modern Banking in Theory and Practice

*Editor: Johanna Graeff*

Banks now a day's provide a wide range of services to satisfy the financial and non-financial needs of all types of customers from the smallest account holder to the largest company and in some cases of non-customers. This book focuses on how the technological services in banking sector luring the sustainable development. It describes the need, impact, importance and benefits of modern banking services for the sustainable development of banking sector. In addition, it concentrates on the proposition of sound theoretical models, methodologies and best practices.

Print ISBN: 978-1-68251-355-2 | \$150 | 2018 | Hardcover



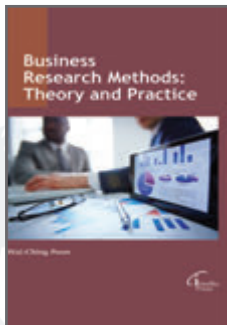


## Knowledge and Practices of Electronic Banking

*Editor: Jun Takasaki*

Today e-banking is the most popular delivery system in banking industry. It is the need of hour to extend e-banking services to banking customers so that bank can maximize the benefits for banks as well as for its customers also. The importance of e-banking is growing day by day as it maximizes the advantage for banks and its clients. This comprehensive work is intended to bridge the gap between business and IT oriented people, providing a resource collection of methods, strategies and application approaches towards this direction.

Print ISBN: 978-1-68251-356-9 | \$145 | 2018 | Hardcover



## Business Research Methods: Theory and Practice

*Editor: Wai-Ching Poon*

Business Research is not tied to any particular subfield, type of analysis, or national context. It describes the goal of providing an innovative cultural/ scientific e-product related to astrophysical knowledge from an e-business point of view in order to take advantage of this perspective to obtain a successful result. This book covers both traditional fields of business administration and cross-functional, multidisciplinary research that reflects the complex character of business problems. It draws on the scientific and business research literature to identify the types of research necessary to further knowledge and promotes the combined use of both inductive and deductive research methods.

Print ISBN: 978-1-68251-357-6 | \$145 | 2018 | Hardcover

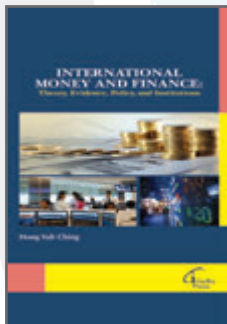


## Methodologies in Technical Communication

*Editor: Judith Timmer*

Rapid change in technical communication has been obvious during the past few decades with the advent of computers, laser printers, the Internet, and other developments. This book aims to demonstrate a mastery of written and visual communication strategies, and an ability to function in a highly technologized work environment, where document-management strategies such as single-sourcing and online collaboration have a prominent place.

Print ISBN: 978-1-68251-358-3 | \$150 | 2018 | Hardcover

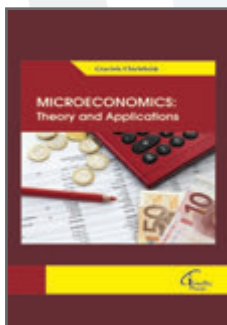


## International Money and Finance: Theory, Evidence, Policy, and Institutions

*Editor: Hong Yuh Ching*

The global financial environment is changing as a result of the globalization process, the growing role of transnational corporations and international debt crisis. Consequently, the aim of the book is the systematization and unification of the laws, conditions, principles, processes which are occurring in the global financial environment. This work provides an overview of the real world with respect to international finance. It explains not only how things look now but also where we have been and why things changed along the way. It describes current economic conditions and past trends with respect to the most critical international macroeconomic indicators.

Print ISBN: 978-1-68251-359-0 | \$145 | 2018 | Hardcover

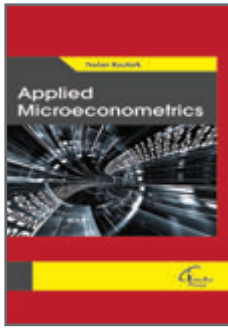


## Microeconomics: Theory And Applications

*Editor: Graciela Chichilnisk*

Microeconomics is an economic theory concerned with the actions of individuals, businesses, or modern households under certain economic conditions. The applications of microeconomics are vast, though they may not always be accurate as it is difficult to mimic the conditions of a real individual. This book aims to focus on building intuition about economic models while providing students with the mathematical tools needed to go further in their studies. The text also seeks to facilitate that linkage by providing many numerical examples, and extended discussions of empirical implementation—all of which are intended to show students and practitioners how microeconomic theory is used today.

Print ISBN: 978-1-68251-360-6 | \$145 | 2018 | Hardcover

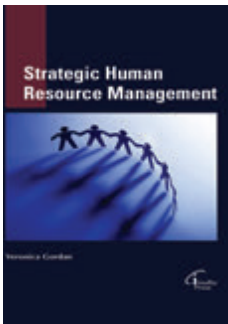


### Applied Microeconometrics

*Editor: Nalan Baştürk*

Microeconometrics deals with the theory and applications of methods of data analysis developed for microdata pertaining to individuals, households, and firms. Microdata are usually either cross sectional, in which case they refer to conditions at the same point in time, or longitudinal (panel) in which case they refer to the same observational units over several periods. This comprehensive guide will be of interest for students and researchers in microeconomics, in applied econometrics, or in data-oriented microeconomics sub-disciplines; and as a reference work for graduate students and applied researchers who wish to fill in gaps in their tool kit.

Print ISBN: 978-1-68251-361-3 | \$145 | 2018 | Hardcover



### Strategic Human Resource Management

*Editor: Veronica Gordan*

Strategic human resource management requires thinking ahead, and planning ways for an organization to better meet the needs of its employees, and for the employees to better meet the needs of the company. It examines some aspects of the external environments of organizations, whilst discussing globalization. The purpose of this work is to assist students and practitioners as well as for those already making HR decisions do so in a way that takes advantage of what we have learned from research in SHRM.

Print ISBN: 978-1-68251-364-4 | \$145 | 2018 | Hardcover



### Ethics in Human Resource Management

*Editor: John Anderson*

Ethics and fair treatment play important roles in managing employees at work. Moral awareness, the managers themselves, moral engagement, morality, unmet goals, and rewards all influence ethical behavior. This collection explores some of the ethical dilemmas encountered in the workplace, discussing ethical behavior and values that relate to HR. It looks at relevant ethical tools, such as utilitarianism and relativism in order to examine current practices in the workplace and their links to corporate social responsibility.

Print ISBN: 978-1-68251-365-1 | \$145 | 2018 | Hardcover



### Effective Human Resource Management for Organizational Success

*Editor: Maria Pitto*

Today in the world, global competition is the basic element to define firms' strategies as a result industrial economy has been experienced to pass toward to knowledge economy. Human resource management department has a very important role for supply of the human being to main resources of companies. This book will present a great understanding of human resource management, scope and affecting factors on human resource management, human resource management functions and relationship between organizational effectiveness and human resources management. It reveals that the engagement strategies deployed by the organization has achieved level of satisfactory.

Print ISBN: 978-1-68251-366-8 | \$145 | 2018 | Hardcover



### Administrative Organizations

*Editor: Ajex Cooper*

An organization is an entity comprising multiple people, such as an institution or an association that has a collective goal and is linked to an external environment. This book provides effective and proven strategies for today's change-oriented organizations. It provide both practical and effective guidance on the intricacies of the institutional structure, its functional activities, and contingency planning.

Print ISBN: 978-1-68251-279-1 | \$150 | 2017 | Hardcover





## Sales and Advertising Management

*Editor: Stephen Healey*

Sales management is a business discipline which is focused on the practical application of sales techniques and the management of a firm's sales operations. Advertising management is a career path in the advertising industry. Advertising and promotions managers may work for an agency, a public relations firm, a media outlet, or may be hired directly by a company to develop branding for the company's product or service. This book focuses on sales and advertising management.

Print ISBN: 978-1-68251-280-7 | \$145 | 2017 | Hardcover



## Financial Administration and Management

*Editor: Sarah Phillips*

Financial administration refers to that set of activities which are related to making available money to the various branches of an office, or an organization to enable it to carrying out its objectives. It is a vital part of business because it is concerned with an organization's resources. This book narrows a significant gap between the theoretical and practical aspects of financial administrations, as it analyzes and synthesizes, simultaneously, the implication for financial administration theory and practice.

Print ISBN: 978-1-68251-281-4 | \$145 | 2017 | Hardcover



## Sales, Channel and Logistics Management

*Editor: L. Donald*

A sale is the exchange of a commodity or money as the price of a good or a service. Sales manager is someone who is responsible for leading and guiding a team of sales people in an organization. Logistics is generally the detailed organization and implementation of a complex operation. Logistics and distribution management organize the storage and distribution of goods. This book focuses on sales, channel and logistics management.

Print ISBN: 978-1-68251-282-1 | \$145 | 2017 | Hardcover



## Tools & Techniques of Marketing Research & Advertising

*Contributors: Stan Lipovetsky, Shon Magnan et al.*

Marketing research seeks to understand the best ways to connect a consumer and a product, with the hopes that the consumer will buy it. It specifies the information required to address these issues, designs the method for collecting information, manages and implements the data collection process, analyzes the results. The aim of this book is to identify the useful tools and techniques for marketing research and advertising growth.

Print ISBN: 9781682511411 | \$160 | Pub Year: 2016 | Hardcover

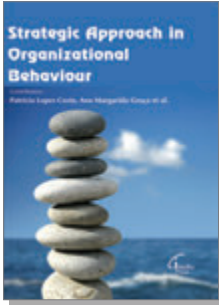


## Consumer Behaviour and Promotion Management

*Editor: Robert Cartland*

Consumer behavior is the study of individuals, groups, or organizations and the processes they use to select, secure, use, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society. Promotion refers to raising customer awareness of a product or brand, generating sales, and creating brand loyalty. It is one of the four basic elements of the market mix, which includes the four P's: price, product, promotion, and place. This book takes a strategic look at consumer behavior in order to guide successful marketing activities.

Print ISBN: 978-1-68251-283-8 | \$145 | 2017 | Hardcover



## Strategic Approach In Organizational Behaviour

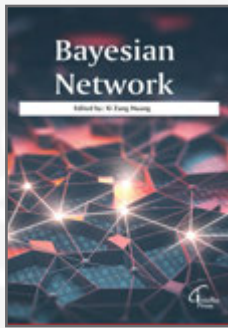
*Contributors: Patricia Lopes Costa, Ana Margarida Graça et al.*

Organizational behavior is a situation which is highlighted by an effort to understand and effectively manage fear of change across the organization. It is the study of human behavior in organizational settings, the interface between human behavior and the organization, and the organization itself. This book shows how to efficiently manage behavior in organizations that in turn helps implement the organization's strategy, affects the organization's productivity.

Print ISBN: 9781682511398 | \$160 | Pub Year: 2016 | Hardcover





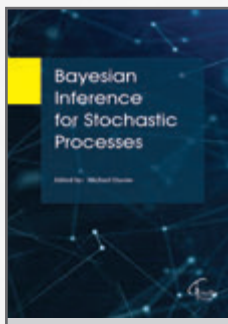


### Bayesian Network

*Editor: Xi Zang Huang*

Revealing recent developments in the field and illustrates the power of Bayesian networks in dealing the modeling of complex systems, this book takes a broad look at the literature on learning Bayesian networks—in particular their structure—from data. Specific topics are focused on in detail, but it is hoped that all the major fields in the area are covered. This book establishes a valuable resource for engineers, researchers, students and all those who are interested in discovering and experiencing the potential of this major tool of the century.

Print ISBN: 978-1-68251-577-8 | \$155 | 2019 | Hardcover

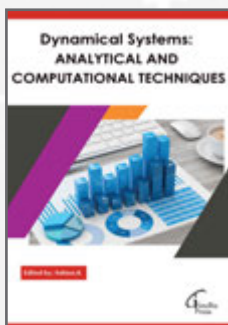


### Bayesian Inference for Stochastic Processes

*Editor: Michael Davim*

Bayesian inferences are different interpretations of probability, and also different approaches depend on those interpretations. This book takes a look at both theoretical foundations of Bayesian inference and practical implementations in stochastic processes. A reference guide for the application of Bayesian inference in the field of stochastic processes, as well as a source document of fundamentals for intermediate Bayesian readers.

Print ISBN: 978-1-68251-578-5 | \$155 | 2019 | Hardcover

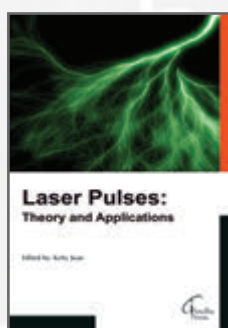


### Dynamical Systems: Analytical and Computational Techniques

*Editor: Ashton.K*

In the last decade or so the process of uncertainty evolution has been studied using a variety of tools from information theory. This book brings together important contributions from renowned international researchers to provide an excellent survey of recent advances in dynamical systems theory and applications. The theory and application of random dynamical systems is at the cutting edge of research in different areas. Dynamical systems theory provides a framework for defining and examining the critical components in complex environments with the certain evolutions in time.

Print ISBN: 978-1-68251-579-2 | \$155 | 2019 | Hardcover



### Laser Pulses: Theory and Applications

*Editor: Ketty Juan*

Laser pulses have been utilized in detecting photovoltaic properties and exploring functional characteristics in the field of solid-state physics. This book discusses aspects of laser pulses generation, characterization, and practical applications. Some new achievements in theory, experiments, and design are demonstrated. A valuable guide of scholarly papers targeting an audience of practicing researchers, academics, PhD students, and other scientists.

Print ISBN: 978-1-68251-580-8 | \$155 | 2019 | Hardcover

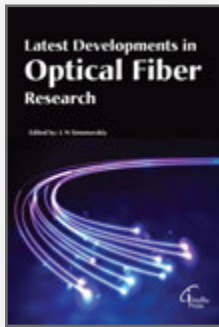


### Research Advances in Quantum Dynamics

*Editor: N. S. Cook*

The field of quantum information received a lot of attention recently due to major development in quantum computing, quantum cryptography, and quantum communications. This book covers some of the applications of quantum mechanics in nuclear physics, medical science, information technology, atomic physics and material science, as well as selected topics of quantum mechanics through different bases and ideas about quantum mechanics. The topics covered in this book will be able to provide a much needed resource for researchers with regard to current fields of research in this dynamic area.

Print ISBN: 978-1-68251-581-5 | \$155 | 2019 | Hardcover

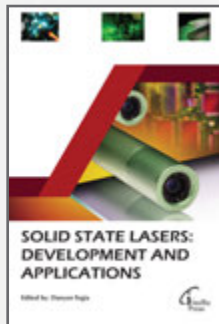


### Latest Developments in Optical Fiber Research

*Editor: L N Simonovskiy*

These days, new applications have been developed over the scientific community and this book fits this paradigm. This book summarizes the current status of know-how in optical fiber applications, the development of fiber optics sensors, and the application of optical fiber for telecommunication systems. This is an essential point of reference for researchers working and teaching in optical fiber technologies, and for industrial users who need to be aware of current developments in optical fiber research areas.

Print ISBN: 978-1-68251-582-2 | \$150 | 2019 | Hardcover

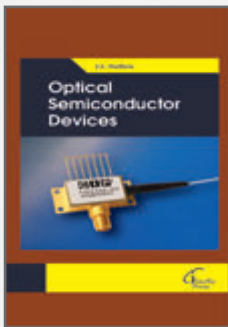


### Solid State Lasers: Development and Applications

*Editor: Danyon Togia*

Nowadays, solid-state lasers remain one of the most rapidly developing branches of laser science and become an increasingly important tool for modern technology. Dealing with theoretical and experimental aspects of solid-state lasers, including optimum waveguide design of end pumped and diode pumped lasers, this book represents a selection of chapters exhibiting various investigation directions in the field of solid-state lasers and the cutting edge of related applications.

Print ISBN: 978-1-68251-583-9 | \$150 | 2019 | Hardcover

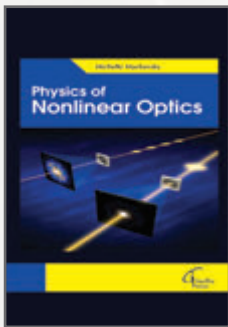


### Optical Semiconductor Devices

*Editor: J.S. Mathew*

Semiconductors are present in most of the modern electronic devices that you use. Because of their merits over vacuum tubes, semiconductor devices have practically completely replaced them in all the fields of electronics. This book is devoted to optical semiconductor devices and their numerous applications in telecommunications, optoelectronics, and consumer electronics-areas where signal processing or the transmission of signals across fiber optic cables is paramount.

Print ISBN: 978-1-68251-393-4 | \$155 | 2018 | Hardcover

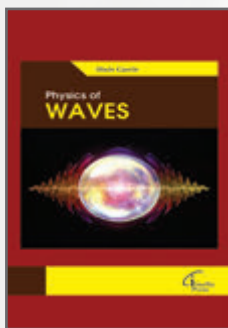


### Physics of Nonlinear Optics

*Editor: Michelle Machovsky*

Physics of Nonlinear Optics describes various major nonlinear optical effects, including physical principles, experimental techniques, up-to-date research achievements, and current or potential applications. This book features clear conceptual descriptions, concise formulations, and emphasizes both theoretical and experimental aspects of nonlinear optics. This book will be of valuable to graduate students and research scientists/engineers who work in optics, electro-optics, laser technology, opto-electronics, quantum electronics, photonics, engineering, chemistry and other multi-disciplinary fields.

Print ISBN: 978-1-68251-394-1 | \$155 | 2018 | Hardcover



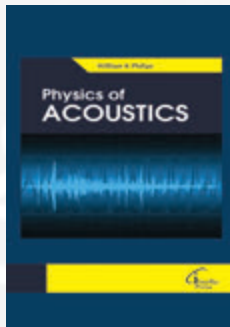
### Physics of Waves

*Editor: Alwin Garcin*

A wave is a method of transferring energy from one place to another without transferring matter. A wave can be transverse, where a disturbance creates oscillations that are perpendicular to the propagation of energy transfer, or longitudinal: the oscillations are parallel to the direction of energy propagation. While mechanical waves can be both transverse and longitudinal, all electromagnetic waves are transverse in free space. This collection aims to illustrate how wave phenomena arise in any system of coupled linear oscillators with translation invariance and local interactions.

Print ISBN: 978-1-68251-395-8 | \$155 | 2018 | Hardcover



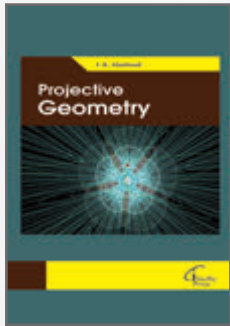


### Physics of Acoustics

*Editor: William K Philips*

Acoustics is a branch of physics that studies sound, or more precisely, mechanical waves in gases, liquids, and solids. Its origins began with the study of mechanical vibrations and the radiation of these vibrations through mechanical waves, and still continues today. Research was done to look into the many aspects of the fundamental physical processes involved in waves and sound and into possible applications of these processes in modern life. This book covers theoretical and experimental aspects of basic and applied acoustics.

Print ISBN: 978-1-68251-396-5 | \$155 | 2018 | Hardcover



### Projective Geometry

*Editor: I.K. Mashood*

Projective geometry is a jewel of mathematics, one of the outstanding achievements of the nineteenth century, a century of remarkable mathematical achievements such as non-Euclidean geometry, abstract algebra, and the foundations of calculus. In recent years new and important applications have been discovered. Surprisingly, the structures of classical projective geometry are ideally suited for modern communications. This comprehensive collection covers the tools and applications of projective geometry.

Print ISBN: 978-1-68251-397-2 | \$155 | 2018 | Hardcover

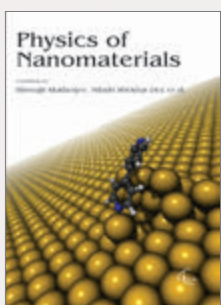


## Handbook of Nanobiogeotechnology

*Contributors: Kartik M. Thakor, Nishith Dharaiya et al.*

Nanobiogeotechnology is the use of biological, ecological and geotechnical engineering data to solve geological problems. Applied biogeotechnology focuses on using plants and human-made structures to control erosion, protect slopes, and restore environmental quality. Consideration of soil as a living ecosystem offers the potential for innovative and sustainable solutions to geotechnical problems. This is a new paradigm for many in geotechnical engineering. Biological function is a key element of soil, sediment and aquatic health. It is essential for healthy ecosystems and critical for the development of sustainable agricultural production. This book envisages the applications of nanobiogeotechnology in the processes involved in solution to geotechnical problems.

Print ISBN: 9781682510902 | \$170 | Pub Year: 2016 | Hardcover



## Physics of Nanomaterials

*Contributors: Biswajit Mukherjee, Niladri Shekhar Dey et al.*

Nanomaterials are defined as materials with at least one external dimension in the size range from approximately 1-100 nanometers. Nanoparticles are objects with all three external dimensions at the nanoscale. Nanoparticles that are naturally occurring or are the incidental byproducts of combustion processes are usually physically and chemically heterogeneous and often termed ultrafine particles. Engineered nanoparticles are intentionally produced and designed with very specific properties related to shape, size, surface properties and chemistry. Materials with structure at the nanoscale often have unique optical, electronic, or mechanical properties. This book covers nanomaterial's properties and their application in devices and also bio and life sciences with emphasis on synthesis, processing, characterization, and applications of materials containing true nanosize dimensions or nanostructures that enable novel/enhanced properties or functions.

Print ISBN: 9781682510353 | \$170 | Pub Year: 2016 | Hardcover



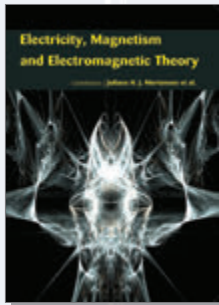


## Biophysics

*Contributors: Chengchen Pan, Halin Zhao, Xueyong Zhao et al.*

Biology studies life in its variety and complexity. It describes how organisms go about getting food, communicating, sensing the environment, and reproducing. On the other hand, physics looks for mathematical laws of nature and makes detailed predictions about the forces that drive idealized systems. Spanning the distance between the complexity of life and the simplicity of physical laws is the challenge of biophysics. Looking for the patterns in life and analyzing them with math and physics is a powerful way to gain insights. Biophysics studies life at every level, from atoms and molecules to cells, organisms, and environments.

Print ISBN: 9781682510131 | \$170 | Pub Year: 2016 | Hardcover

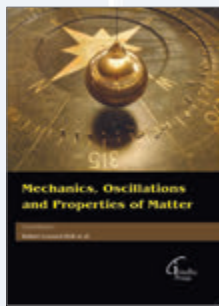


## Electricity, Magnetism, and Electromagnetic Theory

*Contributors: Juliana H. J. Mortenson et al.*

Electromagnetism is a branch of physics which involves the study of the electromagnetic force, a type of physical interaction that occurs between electrically charged particles. The electromagnetic force usually shows electromagnetic fields, such as electric fields, magnetic fields, and light. The electromagnetic force is one of the four fundamental interactions in nature. The electromagnetic force plays a major role in determining the internal properties of most objects encountered in daily life. This book discusses phenomena associated with electricity and magnetism. Although these are two apparently distinct topics, but there actually is a deep connection between them.

Print ISBN: 9781682510193 | \$170 | Pub Year: 2016 | Hardcover

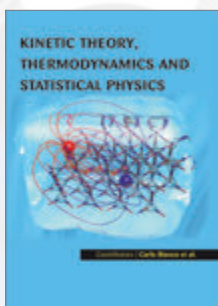


## Mechanics, Oscillations, and Properties of Matter

*Contributors: Robert Leonard Bish et al.*

Mechanics is an area of science concerned with the behavior of physical bodies when subjected to forces or displacements, and the subsequent effects of the bodies on their environment. During the early modern period, scientists such as Galileo, Kepler, and especially Newton, laid the foundation for what is now known as classical mechanics. It is a branch of classical physics that deals with particles that are either at rest or are moving with velocities significantly less than the speed of light. Applied mechanics describes the response of bodies or systems of bodies to external forces. Some examples of mechanical systems include the flow of a liquid under pressure, the fracture of a solid from an applied force, or the vibration of an ear in response to sound. This book emphasizes on the fundamentals of mechanics, oscillations and properties of matter.

Print ISBN: 9781682510186 | \$170 | Pub Year: 2016 | Hardcover

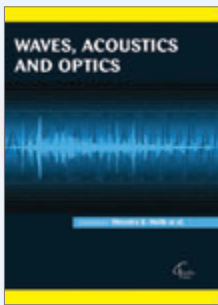


## Kinetic Theory, Thermodynamics, and Statistical Physics

*Contributors: Carlo Bianca et al.*

Statistical physics is a branch of physics that uses methods of probability theory and statistics, and particularly the mathematical tools for dealing with large populations and approximations, in solving physical problems. It can describe a wide variety of fields with an inherently stochastic nature. This book gives introduction to topics such as kinetic theory, equilibrium statistical mechanics and the theory of fluctuations from a modern perspective. The book provides a comprehensive approach of all the fundamental concepts of kinetic theory, thermodynamics and statistical physics.

Print ISBN: 9781682510209 | \$170 | Pub Year: 2016 | Hardcover

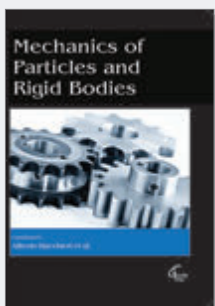


## Waves, Acoustics, and Optics

*Contributors: Hitendra K. Malik et al.*

Light and sound are both waves. Acoustic-optics is a branch of physics that studies the interactions between sound waves and light waves, especially the diffraction of laser light by ultrasound (or sound in general) through an ultrasonic grating. Optics has had a very long and full history, from ancient Greece, through the renaissance and modern times. As with optics, acoustics has a history of similar duration. In contrast, the acousto-optic effect has had a relatively short history, beginning with Brillouin predicting the diffraction of light by an acoustic wave, being propagated in a medium of interaction. This book details the fundamentals of waves, acoustic and optics.

Print ISBN: 9781682510216 | \$170 | Pub Year: 2016 | Hardcover

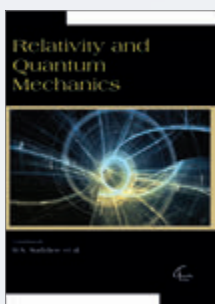


## Mechanics Of Particles and Rigid Bodies

*Contributors: Alfredo Bacchieri et al.*

In physics, a rigid body is an idealization of a solid body in which deformation is neglected. In other words, the distance between any two given points of a rigid body remains constant in time irrespective of external forces applied on it. Even though such an object cannot physically exist due to relativity, objects can normally be assumed to be perfectly rigid if they are not moving near the speed of light. The position of a rigid body is the position of all the particles of which it is composed. To simplify the description of this position, we exploit the property that the body is rigid, namely that all its particles maintain the same distance relative to each other. If the body is rigid, it is sufficient to describe the position of at least three non-collinear particles. This book provides inclusive coverage of numerous topics in mechanics of particles and rigid bodies.

Print ISBN: 9781682510261 | \$170 | Pub Year: 2016 | Hardcover

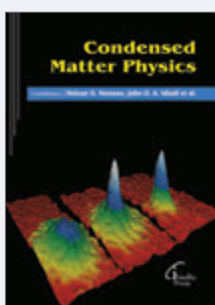


## Relativity and Quantum Mechanics

*Contributors: B.S. Sadykov et al.*

Relativistic Quantum Mechanics (RQM) is any Poincare covariant formulation of Quantum Mechanics (QM). This theory is applicable to massive particles propagating at all velocities up to those comparable to the speed of light  $c$ , and can accommodate massless particles. The theory has application in high energy physics, particle physics and accelerator physics, as well as atomic physics, chemistry and condensed matter physics. Though, RQM is only an approximation to a fully self-consistent relativistic theory of known particle interactions because it does not describe cases where the number of particles changes. This book envisages the theory of relativity and quantum mechanics.

Print ISBN: 9781682510223 | \$170 | Pub Year: 2016 | Hardcover

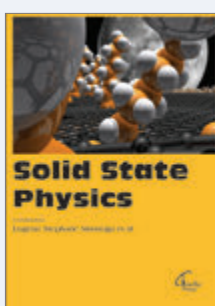


## Condensed Matter Physics

*Contributors: Nelson O. Nenuwe, John O. A. Idiodi et al.*

Condensed matter physics attempts to understand and manipulate the properties of matter in its solid and liquid forms from fundamental physical principles of quantum and statistical mechanics. Because it deals with properties of matter at ordinary chemical and thermal energy scales, condensed matter physics is the subfield of physics that has the largest number of direct practical applications, and has a large overlap with chemistry, materials science, and electrical engineering. It is also an intellectually challenging field that is currently producing many advances in fundamental physics. This book describes the most important advances in condensed matter physics and related subjects.

Print ISBN: 9781682510285 | \$170 | Pub Year: 2016 | Hardcover

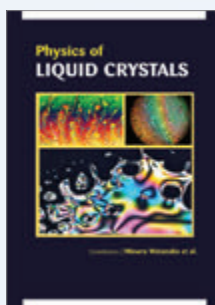


## Solid State Physics

*Contributors: Eugene Stephane Mananga et al.*

Solid-state physics is the study of rigid matter, or solids, through methods such as quantum mechanics, crystallography, electromagnetism, and metallurgy. It is the largest branch of condensed matter physics. Thus, solid-state physics forms the theoretical basis of materials science. It also has direct applications in the technology of transistors and semiconductors. Solid-state physics studies how the large-scale properties of solid materials result from their atomic-scale properties. This book emphasizes on the structure and properties of solid materials.

Print ISBN: 9781682510247 | \$170 | Pub Year: 2016 | Hardcover



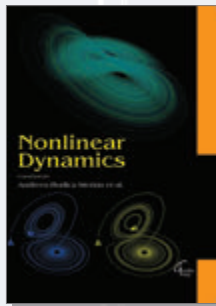
## Physics of Liquid Crystals

*Contributors: Minoru Watanabe et al.*

Liquid Crystals (LCs) are matter in a state that has properties between those of conventional liquid and those of solid crystal. There are many different types of liquid-crystal phases, which can be distinguished by their different optical properties. Liquid crystals can be divided into thermotropic, lyotropic and metallotropic phases. Examples of liquid crystals can be found both in the natural world and in technological applications. Most contemporary electronic displays use liquid crystals. Lyotropic liquid-crystalline phases are abundant in living systems. This book discusses the properties and solicitations of liquid crystals.

Print ISBN: 9781682510292 | \$170 | Pub Year: 2016 | Hardcover



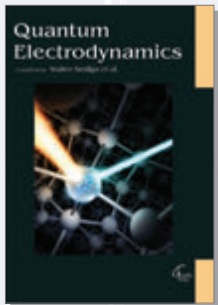


## Nonlinear Dynamics

*Contributors: Andreea Rodica Sterian et al.*

Nonlinear Dynamics is the study of systems governed by equations in which a small change in one variable can induce a large systematic change; the discipline is more popularly known as chaos. Unlike a linear system, in which a small change in one variable produces a small and easily quantifiable systematic change, a nonlinear system displays a sensitive dependence on initial conditions: small or virtually unmeasurable differences in initial conditions can lead to wildly differing outcomes. Nonlinear dynamics has shown that even systems governed by simple equations can display complex behavior. This book comprehends all nonlinear dynamic phenomena associated with mechanical, structural, civil, aeronautical, ocean, electrical, and control systems.

Print ISBN: 9781682510346 | \$170 | Pub Year: 2016 | Hardcover

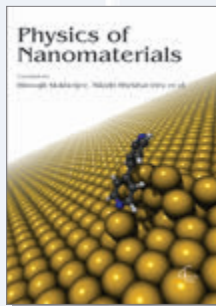


## Quantum Electrodynamics

*Contributors: Walter Smilga et al.*

Quantum electrodynamics, generally referred to as QED, is a quantum field theory of the electromagnetic force. The quantum field theory approach envisages the force between the electrons as an exchange force arising from the exchange of virtual photons. QED applies to all electromagnetic phenomena associated with charged fundamental particles such as electrons and positrons, and the associated phenomena such as pair production, electron-positron annihilation, Compton scattering, etc. This book describes the quantum properties and mechanics associated with the interaction of light with matter.

Print ISBN: 9781682510308 | \$170 | Pub Year: 2016 | Hardcover



## Physics of Nanomaterials

*Contributors: Biswajit Mukherjee, Niladri Shekhar Dey et al.*

Nanomaterials are defined as materials with at least one external dimension in the size range from approximately 1-100 nanometers. Nanoparticles are objects with all three external dimensions at the nanoscale. Nanoparticles that are naturally occurring or are the incidental byproducts of combustion processes are usually physically and chemically heterogeneous and often termed ultrafine particles. Engineered nanoparticles are intentionally produced and designed with very specific properties related to shape, size, surface properties and chemistry. Materials with structure at the nanoscale often have unique optical, electronic, or mechanical properties. This book covers nanomaterial's properties and their application in devices and also bio and life sciences with emphasis on synthesis, processing, characterization, and applications of materials containing true nanosize dimensions or nanostructures that enable novel/enhanced properties or functions.

Print ISBN: 9781682510353 | \$170 | Pub Year: 2016 | Hardcover

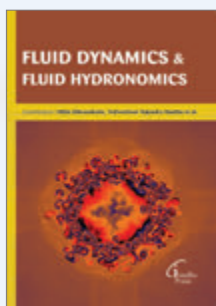


## Reactor Physics

*Contributors: Giuseppe Palmiotti, Massimo Salvatores et al.*

The branch of science that deals with the study and application of chain reaction to induce a controlled rate of fission in a nuclear reactor for the production of energy is referred to reactor physics. A reactor consists of an assembly of nuclear fuel, usually surrounded by a neutron moderator such as regular water, heavy water, graphite, or zirconium hydride, and fitted with mechanisms such as control rods that control the rate of the reaction. The book emphasizes on how the nuclear reactor works, various design approaches of the reactors, and their safe and proficient process.

Print ISBN: 9781682510315 | \$170 | Pub Year: 2016 | Hardcover



## Fluid Dynamics & Fluid Hydraulics

*Contributors: Milda Bilinauskaite, Vishveshwar Rajendra Mantha et al.*

Fluid dynamics is a sub discipline of fluid mechanics that deals with fluid flow the natural science of fluids (liquids and gases) in motion and it is the branch of applied science that is concerned with the movement of liquids and gases. Whereas hydrodynamics is part of a larger field called fluid mechanics that studies how energy and forces interact with fluids, including gases and liquids. This book helps in turbulence and complex flows on an internationally competitive level and also focuses on demixing in three-phase flows, phase inversion, particle-fluid interaction.

Print ISBN: 9781682510773 | \$170 | Pub Year: 2016 | Hardcover



### Solid State Devices and Electronics

*Contributors: Sergey G. Lebedev et al.*

Solid-state electronics are those circuits or devices built entirely from solid materials and in which the electrons, or other charge carriers, are confined entirely within the solid material. Common solid-state devices include transistors, microprocessor chips, and RAM. In a solid-state component, the electric current is confined to solid elements and compounds engineered specifically to switch and amplify it. Current flow can be understood in two forms: as negatively charged electrons, and as positively charged electron deficiencies called holes. This book deals with the physics behind the operation of semiconductor devices and show how these principles are applied in several different types of semiconductor devices.

Print ISBN: 9781682510254 | \$170 | Pub Year: 2016 | Hardcover

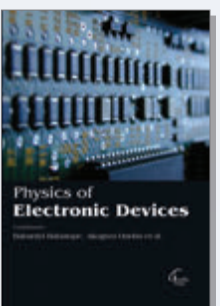


### Optics & Optical Science: Engineering & Fundamentals

*Contributors: Victor V. Apollonov et al.*

Optical science is the study of the generation of electromagnetic radiation, the properties of that radiation, and the interaction of that radiation with matter, especially its manipulation and control. This book aims to expose the science of optics and optical engineering without the complications of advanced physics and mathematical theory.

Print ISBN: 9781682511008 | \$170 | Pub Year: 2016 | Hardcover

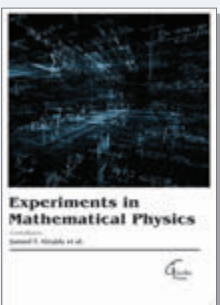


### Physics of Electronic Devices

*Contributors: Babaniyi Babatope, Akogwu Onobu et al.*

The word electronics is derived from electron mechanics, which means to study the behavior of an electron under different conditions of applied electric field. The device which controls the flow of electrons is called electronic device. These devices are the main building blocks of electronic circuits. Electronic devices are playing a major role in everyday life. The various electronic devices we use in everyday life include mobile phones, digital camera, ATM, pen drive television and much more. This book covers the physical phenomena involved in the operation of semiconductor devices, and shows how the phenomena determine the properties of specific devices such as transistors, light emitting diodes and semiconductor lasers.

Print ISBN: 9781682510339 | \$170 | Pub Year: 2016 | Hardcover



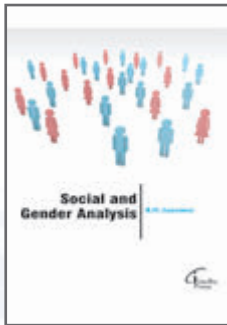
### Experiments in Mathematical Physics

*Contributors: Jameel F. Alzaidy et al.*

Mathematical Physics defines the field as the application of mathematics to problems in physics and the development of mathematical methods suitable for such applications and for the formulation of physical theories. This book is a condensed exposition of the mathematics that is met in most parts of physics, and also focuses on the traditional mathematical methods of physics, Fourier series, calculus of variations, and including differential geometry.

Print ISBN: 9781682511084 | \$170 | Pub Year: 2016 | Hardcover



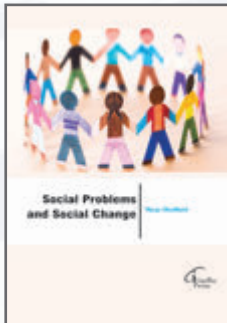


## Social and Gender Analysis

*Editor: R.H. Lawrence*

Social analysis is the practice of systematically examining a social problem, issue or trend, often with the aim of prompting changes in the situation being analyzed. Gender analysis is a type of socio-economic analysis that uncovers how gender relations affect a development problem. Gender analysis frameworks provide a step-by-step methodology for conducting gender analysis. This book deals with social and gender analysis.

Print ISBN: 978-1-68251-284-5 | \$ 140 | 2017 | Hardcover



## Social Problems and Social Change

*Editor: Ness Herbert*

Social problems are the general factors that affect and damage society. A social problem is normally a term used to describe problems with a particular area or group of people in the world. Social change refers to an alteration in the social order of a society. Social change may include changes in nature, social institutions, social behaviors, or social relations. This book illustrates how to create the social breakthroughs needed to solve urgent global threats such as poverty, disease, and hunger.

Print ISBN: 978-1-68251-285-2 | \$ 140 | 2017 | Hardcover



## Social Structure and Change

*Editor: C. Pilkey*

Social structure is the patterned social arrangements in society that are both emergent from and determinant of the actions of the individuals. It is the system of socioeconomic stratification, social institutions, or, other patterned relations between large social groups. This book deals with urban and institutional development, economic development, income distribution, labor relations, ethnic relationships and problems, the role of women, and changes in education.

Print ISBN: 978-1-68251-286-9 | \$ 140 | 2017 | Hardcover

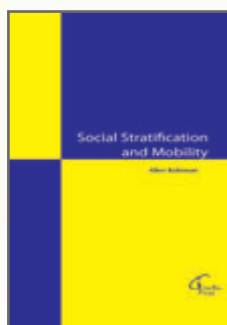


## Social Welfare Administration

*Editor: Matthew Taylor*

Social welfare is organized public or private social services for the assistance of disadvantaged group. Social welfare administration is the process of efficiently providing resources and services to meet the needs of the individuals, families, groups and communities to facilitate social relationship and adjustment necessary to social functioning. This book discusses the key aspect of social welfare administration and developmental issues. It also covers the issues that are undertaken with regard to an individual, group and community in the process of organization and direction of a social institution.

Print ISBN: 978-1-68251-287-6 | \$ 145 | 2017 | Hardcover

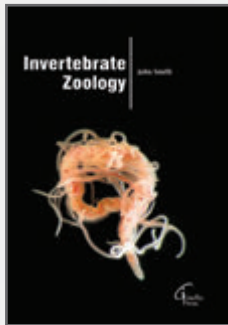


## Social Stratification and Mobility

*Editor: Allen Robinson*

Social stratification is a society's categorization of people into socioeconomic strata, based upon their occupation and income, wealth and social status, or derived power. As such, stratification is the relative social position of persons within a social group, category, geographic region, or social unit. Social mobility is defined as the movement of individuals, families, households, or other categories of people within or between layers or tiers in an open system of social stratification. This book provides refreshing take on existing theories, incorporates the latest data, and lends new perspectives to classic debates.

Print ISBN: 978-1-68251-288-3 | \$ 145 | 2017 | Hardcover



### **Invertebrate Zoology**

*Editor: John Smith*

Invertebrate zoology is the biological discipline that consists of the study of invertebrate animals, i.e. animals without a backbone. Invertebrates are a vast and very diverse group of animals that includes sponges, echinoderms, tunicates, numerous different phyla of worms, molluscs, arthropods and many additional phyla. This book provides a solid conceptual framework for advanced work in behavior, ecology, physiology, and related subjects. It also presents the classical information about the invertebrate in lucid manner.

Print ISBN: 978-1-68251-289-0 | \$ 150 | 2017 | Hardcover



### **Vertebrate Ecophysiology**

*Editor: A. Russel*

Ecophysiology is a biological discipline that studies the adaptation of an organism's physiology to environmental conditions. It is closely related to comparative physiology and evolutionary physiology. Ecophysiology attempts to clarify the role and importance of physiological processes, such as digestion and respiration, in the ecological relations of species in their natural habitats. This book provides an excellent introduction to the science and methodology of vertebrate ecophysiology.

Print ISBN: 978-1-68251-290-6 | \$ 150 | 2017 | Hardcover

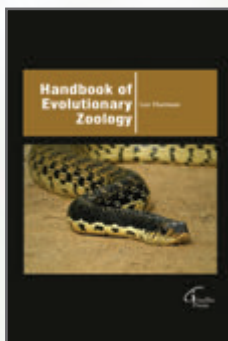


### **The Life of Vertebrates**

*Editor: Tony Paul*

A vertebrate is an animal that has a backbone and a skeleton. These are an animal of a large group distinguished by the possession of a backbone or spinal column, including mammals, birds, reptiles, amphibians, and fishes. This book reviews controversial topics such as the origin of chordates, punctuational evolutionary changes, and the nature of progress in evolution, providing analyses and comparisons of the homeostatic capacities and evolutionary potential of the various groups of vertebrates.

Print ISBN: 978-1-68251-291-3 | \$ 150 | 2017 | Hardcover

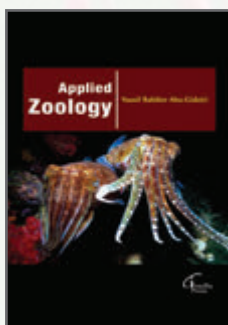


### **Handbook of Evolutionary Zoology**

*Editor: Lee Harmon*

Zoology is the branch of biology that relates to the animal kingdom, including the structure, embryology, evolution, classification, habits, and distribution of all animals, both living and extinct, and how they interact with their ecosystems. There are several sub-branches within this field, including ethology, zoography, and anthrozoology. This book presents the fundamentals of zoology.

Print ISBN: 978-1-68251-292-0 | \$ 160 | 2017 | Hardcover



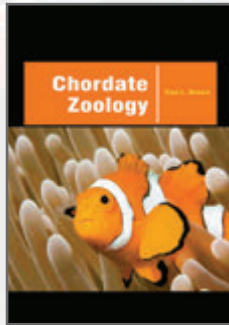
### **Applied Zoology**

*Editor: Yousif Babiker Abu-Gideiri*

Zoology is the branch of science that involves the study of animals and animal behavior. It includes the structure, embryology, evolution, classification, habits, and distribution of all animals, both living and extinct, and how they interact with their ecosystems. This book focuses on recent concepts of applied zoology.

Print ISBN: 978-1-68251-293-7 | \$ 150 | 2017 | Hardcover



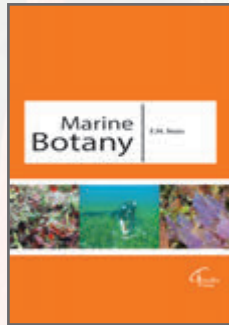


### Chordate Zoology

*Editor: Dan L. Brown*

Chordates are animals possessing a notochord, a hollow dorsal nerve cord, pharyngeal slits, an endostyle, and a post-anal tail for at least some period of their life cycles. Chordates went on to become one of the most successful of all animal phyla, colonizing the land and sea and becoming the fourth most diverse phylum, after arthropods, nematodes, and mollusks, with over 100,000 species. This book deals with chordate zoology.

Print ISBN: 978-1-68251-294-4 | \$ 150 | 2017 | Hardcover

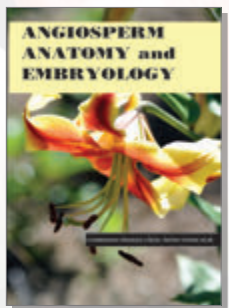


### Marine Botany

*Editor: E.M. Seuss*

Marine botany is the study of aquatic plants and algae that live in seawater of the open ocean and the littoral zone, along shorelines of the intertidal zone, and in brackish water of estuaries. This book explores the startling diversity and environmental dynamics of the hundreds of micro- and macroalgae, seagrasses, mangroves, and salt marshes as well as phytoplankton and benthic communities that comprise the flourishing botanical garden submerged in and around the surface of our vast oceans.

Print ISBN: 978-1-68251-297-5 | \$ 150 | 2017 | Hardcover

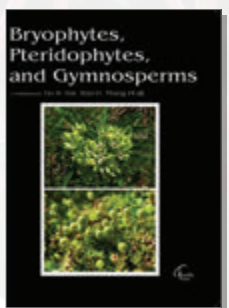


### Angiosperm Anatomy and Embryology

*Contributors: Barbara J Bliss, Stefan Wanke et al.*

Angiosperms are seed-producing plants like the gymnosperms and can be distinguished from the gymnosperms by characteristics including flowers, endosperm within the seeds, and the production of fruits that contain the seeds. This book is intended to demonstrate how embryological characteristics can be practically applied to systematic and evolutionary studies to show which bryological characters are most likely to be useful for the studies at a given taxonomic level.

Print ISBN: 9781682510438 | \$170 | Pub Year: 2016 | Hardcover

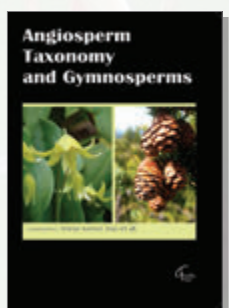


### Bryophytes, Pteridophytes, and Gymnosperms

*Contributors: Do N. Dai, Tran D. Thang et al.*

Bryophytes and pteridophytes are two large groups of spore producing land plants. Bryophytes are a group of small, mostly non-vascular, land plants that share a unique life cycle having a dominant gametophyte. The spore producing body called sporophyte is permanently attached to the sexual body called gametophyte. The gametophytic bodies of bryophytes can be either thalloid or leafy. The pteridophytes, which include the ferns and fern allies, are a group of vascular land plants with a dominant sporophytic body. The gametophytic body, the prothallus, is minute, often heart-shaped and free living. Like bryophytes, members of pteridophytic group do not produce seeds but only spores. Angiosperms are seed-producing plants like the gymnosperms and can be distinguished from the gymnosperms by characteristics including flowers, endosperm within the seeds, and the production of fruits that contain the seeds. The book details the reproductive system and physical characteristics of bryophytes, pteridophytes, and gymnosperms.

Print ISBN: 9781682510421 | \$170 | Pub Year: 2016 | Hardcover



### Angiosperm Taxonomy and Gymnosperms

*Contributors: Wafaa Kamal Taia et al.*

Taxonomy is the science of naming, describing and classifying organisms and includes all plants, animals and micro-organisms of the world. Taxonomy identifies and enumerates the components of biological diversity providing basic knowledge underpinning management and implementation of the convention on biological diversity. Angiosperms are a taxonomic class of plants in which the mature seed is surrounded by the ovule. Living gymnosperms are a diverse group of plants, most of which bear their sporangia in large, prominent strobili or cones. These strobili are similar to those of lycopsids and horsetails. Strobili consist of a shortened stem with several modified leaves that bear sporangia. Like all seed plants, gymnosperms are heterosporous. The sporangia that generate the male microspores and female megaspores are usually borne on separate cones. This book deals with the principles of angiosperm taxonomy and gymnosperms.

Print ISBN: 9781682510445 | \$170 | Pub Year: 2016 | Hardcover