



Gazelle Book Services

STM New Titles

Virtual Reality

Recent Advances for
Health and Wellbeing



Wendy A Powell
Paul M Sharkey
Albert A Rizzo
Joav Merrick
Editors

DISABILITY STUDIES
Joav Merrick (Series Editor)

NOVA

**Hackett
Publishing**

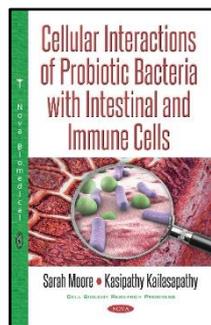
**Nova Science
Publishers**

**Scitus
Academics**

Titles Received in October 2017

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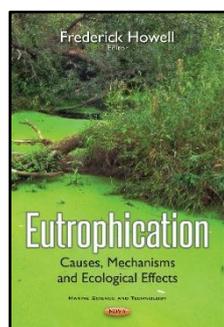


Cellular Interactions of Probiotic Bacteria with Intestinal & Immune Cells (Bacteriology Research Developments Series)

Sarah Moore, Kasipathy Kailasapathy

This book contains novel research and laboratory techniques to study the immune cell molecular behaviour and responses to soluble factors produced by probiotic bacteria and intestinal/probiotic co-cultures that will contribute to advanced scientific knowledge and the commercial development of probiotics. Such understanding will allow scientists to identify new probiotic strains with enhanced immunomodulatory effects, ascertain minimal probiotic dose requirements, distinguish the type of immunological response to probiotics and identify potential probiotic soluble factors that induce immunological reactions. This book is ideally suited for researchers in food and pharmaceutical industries as well as universities; postgraduate students in microbiology and immunology will also find this book to be useful. This book is suitable as a classroom textbook for advanced microbiology, bacteriology and immunology.

HB 9781536121728 £152.50 September 2017 Nova Science Publishers 215 pages

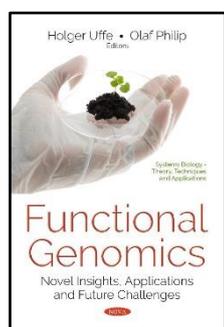


Eutrophication Causes, Mechanisms & Ecological Effects (Marine Science & Technology Series)

Edited by Frederick Howell

This book begins with an investigation on the range of macrofauna and meiofauna species with potential for use as indicators of the benthic conditions throughout the eutrophic Kingston Harbour, presented in Chapter One. Chapter Two evaluates the percentage of a fish skin dye effluent rejection by means of polyethersulfone, polysulfone and NaCl blends, made with okara (BOK), corn straw (BCO) and without presence of biomass (BP). Chapter Three compares the photodegradation of Reactive Blue 198 (RB198) and Reactive Blue 250 (RB250) dyes and evaluates the effect of the dyes' chemical structure and catalyst concentration in the photocatalytic process. Chapter Four covers the degradation of fish skins tanning process wastewater using ZnO supported on NaY and NaA zeolites. In Chapter Five, the authors evaluate the pH effect and the direct electrical current on COD reduction in treatment of the galvanic industry effluent applying the electrocoagulation. In Chapter Six, the authors performed the electrocoagulation process for water treatment, comparing the efficiency of the results with the addition of an organic coagulant (Tanfloc SG). Finally, Chapter Seven covers a study on the use of natural coagulant *Moringa oleifera* extracted in saline sodium chloride (KCl 1M) in the process of coagulation/flocculation.

PB 9781536121735 £78.50 September 2017 Nova Science Publishers 130 pages

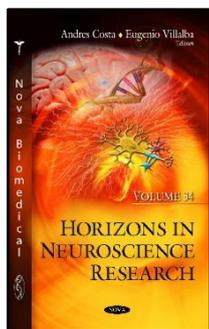


Functional Genomics Novel Insights, Applications & Future Challenges (Systems Biology -- Theory, Techniques & Applications Series)

Edited by Holger Uffe, Olaf Philip

In Chapter One, the authors discuss the gene silencing tool RNA interference, or RNAi, which functions at both transcriptional and post-transcriptional levels. In Chapter Two, the authors study the origins of genome engineering, including its adaptation from prokaryotic to eukaryotic systems and applications. In Chapter Three, the authors discuss the utilisation of different biotechnologies for insect pest management in plants, as well as give insight into recently developed approaches of genome editing for high through-put pest management. Closing the book with Chapter Four, the authors discuss how vital genetic resources, such as the ability to withstand scarcity of nutrients and water as well as to withstand pests and diseases, may be secured for future use in order to improve crops.

PB 9781536125658 £78.50 October 2017 Nova Science Publishers 106 pages



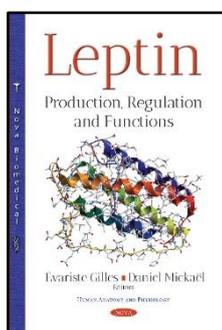
Horizons in Neuroscience Research

Volume 34 (Horizons in Neuroscience Research Series)

Edited by Andres Costa, Eugenio Villalba

In chapter one, Zhenggang Xiong and Liqiong Liu discuss their perception of the genetic alterations of gliomas and the biomarkers that can be used for classification, individualised treatment, and predicting prognosis of gliomas. Next, Norma Angélica Moy-López, Nadia Yanet Cortés-Álvarez, César Rubén Vuelvas-Olmos, María Fernanda Pinto-González, Jorge Guzmán-Muñiz, Jorge Luis Collás-Aguilar and Oscar P. Gonzalez-Perez concentrate on the effect of exposure to maternal HFD and obesity on offspring neurodevelopment in chapter two. In chapter three, Alan J. Pearce abridges current studies engaging techniques such as electroencephalography (EEG), magnetoencephalography (MEG), and transcranial magnetic stimulation (TMS). Pearce addresses the advantages of using these techniques and how these techniques can be employed. In chapter four, Rocio Gomez-Herreros, Isabel Melguizo-Moya, M. Esther Sanchez-Garcia, and M. Asuncion Navarro-Puerto review dementia with Lewy bodies together with the diagnostic approach. Isabel Melguizo-Moya, M. Asunción Navarro-Puerto, Rocío Gómez-Herreros, and M. Esther Sánchez-García discuss late-onset systemic lupus erythematosus and the importance of an altered therapeutic approach in chapter five. After, brain mapping, intra-operative advanced cortical and subcortical mapping, and mapping stimulation protocols currently in use in the Department of Neurosurgery and Neuro-oncology at King's College Hospital are presented by Christian Brogna, MD, PhD, Noemia Pereira, Eduardo C. Ribas, MD, PhD, Holly Jones, Francesco Vergani, MD, PhD, Sanjeev Bassi, Keyoumars Ashkan, and Ranjeev Bhangoo. In chapter seven, María de la Luz Arenas-Sordo, MD, PhD, Carlos P. Viñals-Labañino, MD, Laura L. Flores-García, MD, and Elsa Alvarado Solorio, MD present findings from a study group at the Pediatric Rehabilitation Department of the Instituto Nacional de Rehabilitacion. Moving on, chapter eight by M. Esther Sanchez-Garcia, M. Asuncion Navarro-Puerto, Isabel Melguizo-Moya, and Rocio Gomez-Herreros discusses Primary Sjögren's syndrome (pSS) and the neurological complications that may arise from it. Synji De Paula Mulatiere, M^a Eugenia Gutiérrez Marco, Carmen Moret-Tatay, and M^a José Beneyto Arrojo wrap up the book with a discussion of the concept of resilience in chapter nine.

HB 9781536125146 £238.50 October 2017 Nova Science Publishers 121 pages



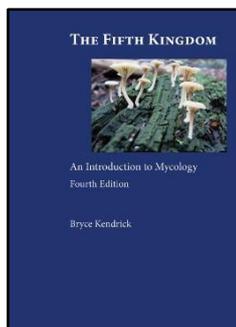
Leptin

Production, Regulation & Functions (Human Anatomy & Physiology Series)

Edited by Évariste Gilles, Daniel Mickaël

In Chapter One, Dr Med Ioannis Iakovou examines whether the link between weight and bone mineral density is caused by or directly correlated with leptin and adiponectin. Afterwards, Chapter Two by Martha A. Ramirez, Adrian A. Arellano, Fang Xie, Elizabeth A. Benavides, Robin A. Katchko, Luis Ayala, Alexandra Calderon, Rita A. Flores, Jean M. Escudero, Duane H. Keisler, Randy L. Stanko, and Michelle R. Garcia investigates the link between leptin and infertility issues caused by defects of abnormalitie sin the corpus luteum. Chapter Three by Professor Jaak Jürimäe, PhD investigates the link between leptin and energy intake and expenditure by athletes. In Chapter Four, Renata Saucedo, PhD, Jorge Valencia, PhD, Claudia Gutierrez, and Arturo Zarate, PhD examine the connection between increased leptin levels and insulin resistance. Next, Tiziana Maria Sirangelo analyzes the role between leptin and obesity, explaining that leptin plays a crucial role in the regulation of food intake in Chapter Five. In Chapter Six, Federico Sireci, MD, Francesco Cappello, Frank Rikki Canevari, MD, Francesco Dispenza, MD, Salvatore Gallina, PhD, Pietro Salvago, MD, and Francesco Martines study the peptidergic immunohistochemical manifestation of leptin in laryngeal SCCs.

PB 9781536125481 £90.50 October 2017 Nova Science Publishers 173 pages



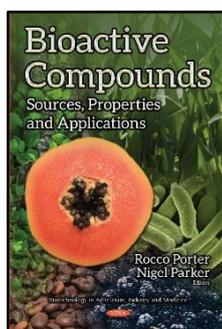
The Fifth Kingdom **An Introduction to Mycology**

Bryce Kendrick

This new edition of *The Fifth Kingdom* has been updated to reflect the most recent developments in mycology, including the field's adoption of a new taxonomical framework for fungi as a whole, and the latest advances in molecular genetics. The chapter on fungicides has been updated to include new discoveries. The discussion of poisonous mushrooms has been revised to include newly recognised types (and treatments) of mushroom poisoning. Chapters on medical aspects of mycology and practical uses for fungi have been expanded. Entirely new chapters -- on applications of mycological training, among other topics -- are all written with Kendrick's characteristic clarity, warmth, and humour -- the qualities that have helped establish *The Fifth Kingdom* as one of the best, and most engaging, introductions to mycology. Now in full colour, and offering a wealth of new illustrations, this edition also provides readers with access to Bryce Kendrick's extensive online collection of photographs, charts, and other visual resources.

PB 9781585104598 £45.99 September 2017 Hackett Publishing Company, 512 pages photos & illus

Biotechnology

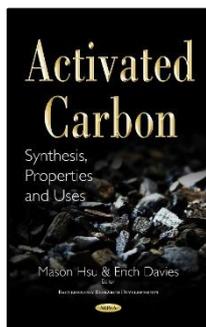


Bioactive Compounds **Sources, Properties & Applications** **(Biotechnology in Agriculture, Industry & Medicine Series)**

Edited by Rocco Porter, Nigel Parker

The study of bioactive compounds has received a considerable rising interest over the last three decades, given their biological activity as reported by scientific evidence linking these substances to the prevention of several types of diseases. Chapter One is aimed at making a wide description of sources, properties and applications of bioactive compounds. Chapter Two summarises content of bioactive compounds (antioxidants, polyphenols, flavonoids, phenolic acids, vitamins, mineral compounds and others) of adaptogenic plants, including antidepressant, antioxidant, anti-inflammatory, antimicrobial and anticancer activities, as well as their potential to prevent several disorders. Chapter Three summarises and discusses the recent updates and progress made so far on bioactive compounds from cyanobacteria and their therapeutic importance on human health. The influence of various bioactive compounds present in plant systems on the dehydration process under thermal stress was investigated in Chapter Four. Chapter Five reviews the scientific literature about the structure of PEs, as well as their natural sources and health effects. Chapter Six focuses on the most recent articles about phenolic compounds, their sources, properties and applications. The aim of Chapter Seven was to characterise the composition and antioxidant activity of new Brazilian *Coffea arabica* cultivars and correlate this information with the genetic background of the coffee plants and the sensory characteristics of the coffee brews. Chapter Eight summarises and updates the current knowledge about the pharmacological properties of the naphthodianthrone – hypericin and pseudohypericin – and to discuss their main medical application – photodynamic therapy – in several areas. In order to further highlight the importance of Brazil's fruitful diversity and its bioactive potential, a number of items related to Brazilian native fruits will be addressed in Chapter Nine, including their biomes of origin, composition of bioactive compounds and potentials, as well as their limitations and future prospects. Chapter Ten discusses the benefits of using fruits containing bioactive compounds in whole wheat cookies, with particular attention to blackberries.

HB 9781536124187 £219.50 September 2017 Nova Science Publishers 361 pages

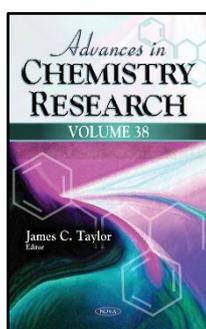


Activated Carbon Synthesis, Properties & Uses (Chemistry Research & Applications Series)

Edited by Mason Hsu, Erich Davies

Activated carbons have been found a large variety of applications in several fields, such as chromatography, medicine, gas storage and environmental protection, among others. Most of these applications require tailored physical-chemistry properties, regarding purity, particles shape, mechanical resistance, homogeneity, surface composition, specific surface area and porosity. Because of their especial properties, activated carbons have attracted increasing attention for several years. As supports and catalysts, they have been used in several reactions both in gas and liquid phases, such as hydrogenation/dehydrogenation, oxidation/reduction, decomposition of hydrocarbons, halogenation and methanation, among others. This book reviews the applications, preparation, properties synthesis, and uses of activated carbon.

HB 9781536123487 £185.99 September 2017 Nova Science Publishers 145 pages

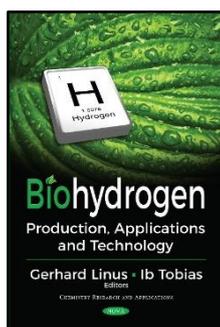


Advances in Chemistry Research Volume 38 (Advances in Chemistry Research Series)

Edited by James C Taylor

Chapter One is focused onto particular groups of hazardous materials (pesticides and dyes) and systematisation of degradation methods according to specified pollutant. The authors investigated the materials with the best performance taking into account catalytic activity, stability and ease of preparation toward the electrochemical behavior of the dyes and pesticides as well as their degradation choosing the proper electrochemical method and conditions. Chapter Two covers a bio-supported, inexpensive and easily available cellulose sulfuric acid that has been used as a catalyst to promote sequential two-step one-pot reactions to synthesise more than twenty derivatives of nitrocoumarins (n-nitro-2H-1-benzopyran-2-one). Chapter Three summarises the recent developments in synthetic methodologies for the construction of 1,4-benzothiazine derivatives. Mechanistic investigations, reactivities, applications, product manipulations and biological potential are also been discussed. In Chapter Four, the authors present the different approaches for studying cellular adhesion and subsequent migration using a toolbox of linear and star-shaped PEG-based materials. Chapter Five compiles and presents the summaries of visible light mediated synthesis and functionalisation of pyrrole and its derivatives. Several review articles and book chapters present the conventional procedures for synthesis of pyrrole and its derivatives, but the visible light mediated synthesis of these components have not yet been archived. Clathrate hydrates (CHs) are inclusion compounds in which tetrahedrally-bonded H₂O molecules form a generally disordered but solid-state host-lattice composed of a periodic array of cages. Chapter Six addresses the catalytic formation kinetics of CHs with H-bonding non-classical guests as studied by infrared spectroscopy. Chapter Seven summarises data as well as ab-initio- band-structure calculations in order to provide guidelines for further development in the field of Clathrate type I crystals.

HB 9781536121308 £238.50 September 2017 Nova Science Publishers 155 pages



Biohydrogen Production, Applications & Technology (Chemistry Research & Applications Series)

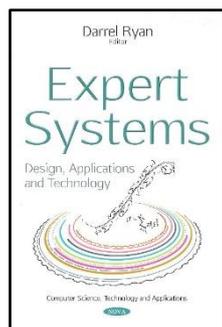
Edited by Gerhard Linus, Ib Tobias

In this book, the potential biofuel biohydrogen is studied in terms of its generation, applications, and technology. In the first chapter, Caroline V. Rodrigues, Kamili O. Santana, Lorena O. Pires, Michel Brienzo, and Sandra I Maintinguer provide a theoretical assessment about the biological methods of hydrogen production, as well as examine their applications on research that has been done regarding waste degradation, encouraging sustainable systems for clean energy generation. In the second chapter, Fernando Grijalva-Hernández, Hugo Iván Velázquez-Sánchez,

Juan Carlos Figueroa-Estrada, and Ricardo Aguilar-López present a study where a kinetic model for Hydrogen production by Desulfovibrio bacteria was substantiated using experimental data and used to conduct a local sensitivity analysis. Next, Biniam T. Maru, Magda Constantí, and Francesc Medina evaluate the way in which glycerol may be used to produce biochemical products through dark fermentation, as well as studying its use as a carbon source. Bringing the book to a close, Albanez, R., Lovato, G., Zaiat, M., Ratusznei, S.M., and Rodrigues, J.A.D. parallel AnSBBR that used pure substrates for hydrogen/methane production with AnSBBR that used hydrogen production runoff to produce methane.

PB 9781536124835 £84.99 October 2017 Nova Science Publishers 124 pages

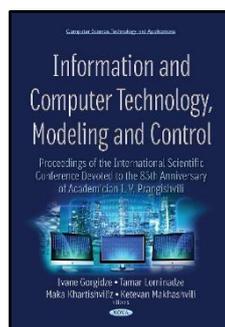
Computing



Expert Systems Design, Applications & Technology (Computer Science, Technology & Applications Series) Edited by Darrel Ryan

The use of unconventional methods of artificial intelligence is the modern trend in the computer support of the solution of the decision-making methods. These methods are based on the use of knowledge of skilled professionals – experts, where this knowledge forms the basis for their high-quality knowledge mental models. Chapter One introduces the expert systems used for the simulation of the decision-making activity of experts when dealing with complex tasks. In terms of theory, the expert knowledge method is used. The introduced expert systems are able to effectively use uncertainties which take their source from inaccurate, incomplete, inconsistent input data, vague concepts of linguistic formulations of the rules, and uncertain knowledge. Chapter Two proposes a solution for heterogeneous data source integration in the information standard formats, based on Rule Based Expert System (RBES) to implement a metadata mining process. Later, it describes the process of automatic modelling in which the proposed RBES support in the data mining technique applications, based on the results of metadata mining process. Finally, it describes the application issues of the proposed solution in real cases. Chapter Three presents ARISTON, which is an integrated mathematical framework with all relevant parameters that constitute a fully automated, structured expert psychometric system for occupational guidance, aiming to identify and retrieve the professions which are nearest to the personality of an individual, while at the same time quantify all nearest “neighbouring” professions.

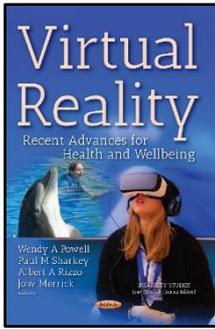
PB 9781536125030 £78.50 October 2017 Nova Science Publishers 133 pages



Information & Computer Technology, Modeling & Control (Computer Science, Technology & Applications Series) Edited by Ivane Gorgidze, Tamar Lominadze, Maka Khartishvili, Ketevan Makhashvili

In the near future, information technology is likely to be one of the most potent growth areas in advanced industrialised countries. Indeed, it is now widely recognised that long-term economic prosperity will crucially depend upon people's success in developing, mastering, exploiting and marketing information systems. Modelling, analysis, and control of complex systems have interested scientists and engineers for a long time. With the invention of digital computers, modelling and control have taken great importance with numerous applications in various spheres. Although the argument for the rapid development and introduction of information technology into the many aspects of our everyday existence is extremely strong, unfortunately it remains the case that at present the technology is being used effectively by only a small proportion of the people who could benefit from it. In this book, the papers of the Georgian scientists and engineers are presented.

HB 9781536120752 £219.50 September 2017 Nova Science Publishers 375 pages



Virtual Reality

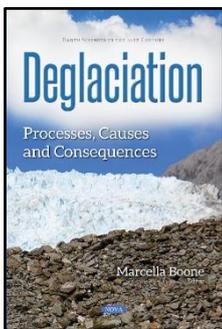
Recent Advances for Health & Wellbeing (Disability Studies Series)

Edited by Wendy Powell, Paul M Sharkey

Virtual reality and human interaction with it is a complex topic, and certainly not one which will be mastered overnight; but across the world, there is excellent research being carried out for all of these important domains. As humanity extends its understanding of the interplay with these system components, developers will be well-positioned to design better and more effective virtual reality interventions and come closer to realising the full potential of virtual reality for health and well-being. In this book, the authors present a number of short papers from research groups around the world working in this important and complex field. The chapters explore a range of issues, suggesting routes forward and offering insights into both the potential and the challenges of this rapidly maturing technology.

PB 9781536124545 £78.50 October 2017 Nova Science Publishers 130 pages

Earth Sciences



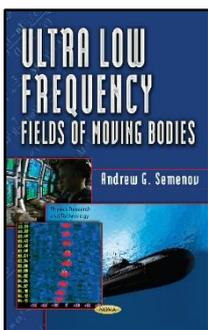
Deglaciation

Processes, Causes & Consequences (Earth Sciences in the 21st Century Series)

Edited by Marcella Boone

Global climate during the Quaternary has been deeply influenced by glacial-interglacial oscillations. Since the onset of glaciations, the Earth has experienced alternations between warm and stable climatic periods – coinciding with interglacials, and cold and highly variable climatic intervals – coinciding with glacials. In a suborbital timescale, climate oscillations were maximal during glacial onsets and, very especially, during deglaciations. Previous deglaciation events were associated with diverse changes in earth's atmospheric, physical and biotic environments. Chapter One contains a brief outline of a case study conducted in western Canada to constrain the Late Pleistocene retreat of the Laurentide Ice Sheet from the region. Chapter Two reports on the influence of deglaciations in the mid-latitude European climate. Chapter Three aims to highlight the influence of global and regional paleoceanographic changes on the deglaciation of the marine based Barents ice sheet since the last glacial maximum (LGM) until the onset of marine environment in the Holocene.

PB 9781536125016 £90.50 October 2017 Nova Science Publishers 168 pages

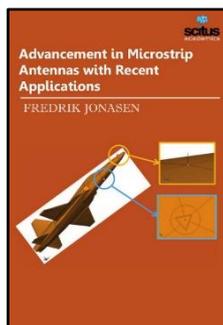


Ultra Low Frequency Fields of Moving Bodies (Earth Sciences in the 21st Century Series)

Andrey (Andrew) Grigorievitch Semenov

A new approach to body detection and control based on its unavoidable ultra-low frequency oscillation related to its motion in media (mainly, in the ocean) is presented. The main concept of this approach lies in enriching the list of moving body control enabling factors by influence of ULF oscillations on the body's outer fields. It is shown that ULF oscillation of a moving body could be detected in the atmosphere or in the ocean directly with the aid of ambient fluid ULF pressure or velocity changes, say, observed inside an oceanic layer or on the ocean's surface. But ULF oscillation's indirect appearance is demonstrated to be the most important for submerged moving body detection. This appearance comprises an additional ULF modulation (distortion) of outer natural sound fields related to ocean wind noise and distant shipment noise in forward scattering. The physical analogy an indirect moving body ULF oscillation is justified in the book and could be partly compared to the recent universe gravity waves detection discovery in 2016 with the aid of electromagnetic wave distortion that is provided by gravity wave propagation.

HB 9781536126099 £152.50 October 2017 Nova Science Publishers 195 pages

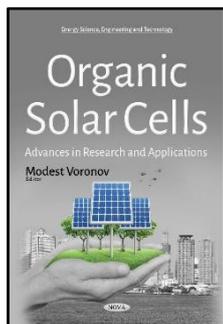


Advancement in Microstrip Antennas with Recent Applications (Electrical & Electronics Engineering)

Fredrik Jonasen

In telecommunication, there are several types of microstrip antennas the most common of which is the microstrip patch antenna or patch antenna. This book discusses basic and advanced concepts of microstrip antennas, including design procedure and recent applications. It shall be of immense valuable tool for electrical and computer engineers and other scientists well versed in microstrip antenna technology.

HB 9781681172804 £141.50 January 2017 Scitus Academics 290 pages

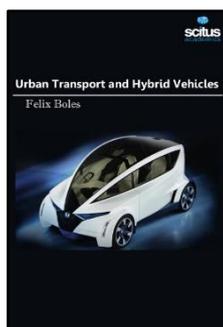


Organic Solar Cells Advances in Research & Applications (Energy Science, Engineering & Technology Series)

Edited by Modest Voronov

The last two decades have seen unprecedented research progress made in the fabrication and testing of organic solar cell (OSC) devices due to, among other things, rapid growth of interest in the development of organic materials for photovoltaic applications, the ease of processing, and the prospect of achieving high power conversion efficiency (PCE) cost effectively. The effects of impurity doping at the ppm level in photovoltaic organic semiconductors, including: (i) "Seven-nines" purification of organic semiconductors, (ii) pn-control of single and co-deposited organic semiconductors by impurity doping, (iii) ionisation sensitisation of doping showing the doping efficiency of 100%, (iv) ppm-doping effects in the simplest n+p-homojunction organic photovoltaic cells, and (v) the Hall effect of bulk-doped organic single crystals, are discussed in Chapter One. In Chapter Two the fabrication and characterisation of perovskite-type solar cells are reviewed and summarised such as $\text{CH}_3\text{NH}_3\text{PbI}_3$, $[\text{HC}(\text{NH}_2)_2]\text{PbI}_3$, and CsSnI_3 , which are expected for solar cell materials. Chapter Three proposes an experimental method to tailor SDE and optimise the power conversion efficiency (PCE), based on the electrical transport curve. Chapter Four provides a brief history of organic photovoltaic cell devices, factors limiting stability and power conversion efficiency, fundamental parameters that have been reported to improve the general performance of the devices, and recent developments in organic solar cell devices.

PB 9781536124019 £78.50 September 2017 Nova Science Publishers 100 pages

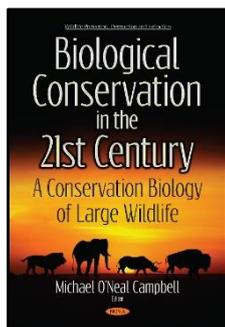


Urban Transport and Hybrid Vehicles (Energy Engineering Series)

Edited by Felix Boles

The many economic, social and environmental problems worldwide are also primarily urban problems. This leads to a logical prescription that cities should deal with these problems in an integrated way, with coordination across geography, issues, disciplines and agencies. This book emphasises on both technical and non-technical edges of the field to be remedy for typical road transport problems. Traditionally, the focus of urban transportation has been on passengers as cities were viewed as locations of utmost human interactions with intricate traffic patterns linked to commuting, commercial transactions and leisure/cultural activities. However, cities are also locations of production, consumption and distribution, activities linked to movements of freight. Conceptually, the urban transport system is intricately linked with urban form and spatial structure. Urban transit is an important dimension of mobility, notably in high density areas. Many research results are combined together to make this book a 'valuable guide for industry, scholars and policy-makers.

HB 9781681176178 £160.99 January 2017 Scitus Academics 312 pages

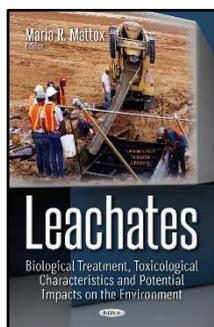


Biological Conservation in the 21st Century A Conservation Biology of Large Wildlife (Wildlife Protection, Destruction & Extinction Series)

Edited by Michael O'Neal Campbell

This edited book, composed of chapters written by scholars of the environmental and biological sciences, examines selected topics from the vast field of conservation biology, with a focus on some of the issues that dominate the current discourses and practices on the conservation biology of large wildlife. The first chapter examines the history and status of conservation biology and examines the status of large wildlife in conservation biology research. The second chapter examines the issues related to urban forestry and conservation, justified by the vast expansion of urban landcover into the habitats of large wildlife and the consequences for people and animals. Chapters Three and Four focus on big cats in the Americas and apply ideas from the theory of conservation biology to assess their conservation possibilities. Chapter Five examines the land cover conflicts that occur between people and animals when transportation networks intrude on habitats. Chapter Six looks at the nuances of governance and the impact on conservation policy. Chapter Seven describes the value of integrated research and geomatics in the applications to protected management. Chapter Eight takes a novel, total ecosystem approach by examining micro- and meso-fauna and their function in ecosystems inclusive of macro-fauna. Chapter Nine takes a case study of vultures, which are the most important scavengers in the world, and examines the impacts of recent diseases that severely decimated their numbers. Chapter Ten takes a case study of a unique savanna area on the forested West African coast, and investigates the ecology of the area and the factors for the extinction of large wildlife.

HB 9781536120738 £185.99 September 2017 Nova Science Publishers 290 pages

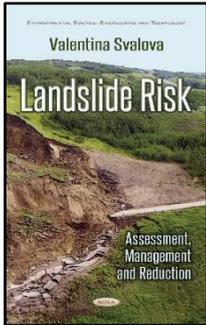


Leachates Biological Treatment, Toxicological Characteristics & Potential Impacts on the Environment (Environmental Research Advances Series)

Edited by Maria R Mattox

In chapter one by Antoine P Trzcinski, Ph.D., a simulated Organic Fraction of Municipal Solid Waste (OFMSW) was treated in an anaerobic two-stage membrane process in order to develop and optimise said process, effectively allowing for improvement upon the current performances obtained with single stage designs. In chapter two, Huu Tap Van and Van Tuyen Trinh present a study with the intent to improve current methods of removal of organic compounds from landfill leachate by Peozone. In chapter three by Hamidi Abdul Aziz and Hossein Farraji, main hazardous compounds of LL and their expected effects on the environment are introduced, as well as plant-based treatment methods. Next, chapter four by Adekunle A Bakare, Chibuisi G Alimba, Titilayo Hassan, Ebenezer O Ajayi, and Akindayo A Sowunmi explores the 96 h median lethal toxicity and cytogenotoxicity of a sawmill wood leachate from a sawmill dumpsite at Ibadan, Nigeria in *Clarias gariepinus* were investigated, providing further research on the DNA damaging potential of sawmill wood leachate (SWL) in aquatic vertebrates.

HB 9781536125085 £152.50 October 2017 Nova Science Publishers 171 pages

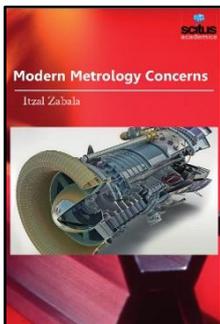


Landslide Risk
Assessment, Management & Reduction
(Environmental Science, Engineering & Technology Series)

Valentina Svalova

A landslide is a major geological hazard, which poses a serious threat to the global human population and various infrastructures like highways, rail routes and civil structures like dams, buildings and others. Landslides occur very often during other major natural disasters such as earthquakes, floods and volcanoes. The word “landslide” represents only a type of movement that is a slide. It is generally used as a term to cover all the types of land movements including falls, creeps, spreads, flows and other complex movements. Geological risk is a relatively new and not fully explored concept. There are many definitions of geological risk. Oftentimes, a scientific study or a scientific approach to the problem begins with a presentation of the author's position and the choice of the definition of geological risk for this problem. One of the most common approaches defines risk as the expectation of the damage, or the product of the probability of possible hazardous events on the damage produced. The problem with landslide risk management is that it is seen as a series of events leading to landslide risk reduction.

HB 9781536122947 £185.99 October 2017 Nova Science Publishers 60 pages

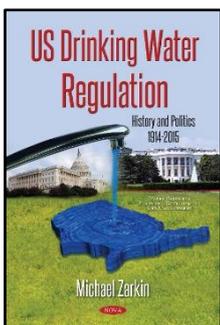


Modern Metrology Concerns
(Environment Engineering Series)

Itzal Zabala

Metrology covers both experimental and theoretical aspects of measurement and the determination of the levels of uncertainty of these aspects. The study of measurement is a basic requirement in any field of science and technology, most importantly in engineering and manufacturing. Since metrology is the study of measurement, it is expected to enforce, validate and verify predefined standards for traceability, reliability, and precision. All of these are factors that would affect the validity of measurement. Although these standards vary widely, these are mandated by the government, the agencies, and some treaties. Subsequently, these standards are verified and tested against a recognized quality system in calibration laboratories. The experimental aspect of metrology is that which deals with the investigation of the relationship among variables. These variables are established depending on set of observations being considered or classified. As such, it is in this aspect that hypotheses are established and tested.

HB 9781681175317 £160.99 January 2017 Scitus Academics 302 pages

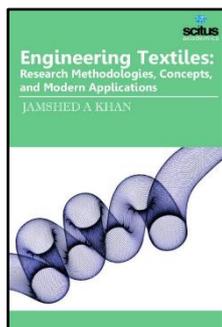


US Drinking Water Regulation
History & Politics, 1914-2015
(Water Resource Planning, Development & Management Series)

Michael Zarkin

What constitutes “safe” drinking water? For more than a century, the US government has attempted to answer this question by setting national standards for drinking water quality. In a federal system of governance, however, national standards only go so far. State and local governments have long considered it their prerogative to select water supplies and treatment technologies – decisions that largely determine whether or not national standards will ever be met. Tragedies like the drinking water crisis in Flint, MI remind us that there are definite limits to what federal power can achieve. Nevertheless, the quest to raise the quality of drinking water through national standards remains an important and underappreciated episode in the history of US public health policy. In this book, Michael Zarkin traces the development of US drinking water standards, beginning with the earliest efforts by the US Public Health Service to craft national standards, and ending with the EPA's most recent efforts to implement the Safe Drinking Water Act. Along the way, Dr Zarkin tells the story of the ideas, political battles, and scientific controversies that shaped our nation's drinking water regulations.

PB 9781536125672 £78.50 October 2017 Nova Science Publishers 200 pages

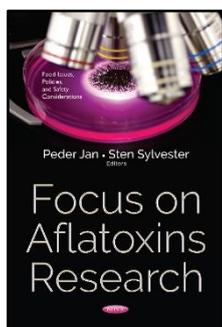


Engineering Textiles Research Methodologies, Concepts & Modern Applications (Textile Engineering Series)

Jamshed A Khan

Textile engineering, also known as textile technology, is the study of various principles from engineering and scientific methodologies. Textile technology can cover a broad range of topics, from chemistry and physics in textile production to textiles used in apparel and interior design. These principles are then implemented for the processing and production of all kinds of textile fabric and yarns from textile fibers. The discipline involves extensive study of chemical and physical principles, which is then utilized for the detailed study and analysis of the behavior of polymers involved in the formation of textile fiber. Other than textile engineering, the working mechanics of this industry involve design, manufacture, distribution, and sales of clothing and apparels. Textile engineering is an innovative field as it is a scientific realm. It involves the creative research, study, and exploration of new techniques for production and improvisation.

HB 9781681174587 £160.99 January 2017 Scitus Academics 330 pages

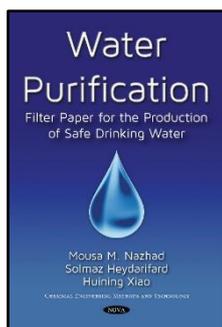


Focus on Aflatoxins Research (Food Issues, Policies, & Safety Considerations Series)

Edited by Peder Jan, Sten Sylvest

In the first chapter, Yin-Hui Leong, Nurul Izzah Ahmad, and Rahmat Awang, provide an overview of literature on recent progress in aflatoxins research including health effects and human exposure through alimentary or dermal pathways. Next, Mufida Aljicevic MD, PhD, and Damir Ljuboja present a study with the goal to decide whether foods of plant origin have quantifiable concentrations of aflatoxin B1. Additionally, they aimed to examine whether the urine of healthy participants contains measurable aflatoxin B1 in the second chapter. The third chapter by Hsin-Bai Yin, Anup Kollanoor-Johny, and Kumar Venkitanarayanan pinpoints the potential of various natural approaches and their applications in controlling AF contamination at pre- and post-harvest stages of agriculture. The fourth and final chapter examines the presence of toxigenic species in samples for lactating goats, determining whether this indicates a potential risk of contamination of dairy products.

PB 9781536125696 £90.50 October 2017 Nova Science Publishers 154 pages

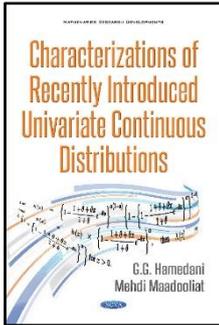


Water Purification Filter Paper for the Production of Safe Drinking Water (Chemical Engineering Methods & Technology Series)

Mousa M Nazhad, Solmaz Heydarifard, Huining Xiao

A large segment of the population in undeveloped and developing countries drink untreated or partially treated water. Annually, 6 to 60 billion cases of gastrointestinal illnesses are continuously reported due to safe drinking water, and over 1.6 million people die due to these water-borne diseases. Owing to increasing concern about global water-related diseases associated with drinking water, finding an affordable and suitable way of water treatment is of great importance. Filtration is a promising point-of-use water treatment. Currently, most water filtration membranes are made of synthetic polymers derived from non-renewable resources. Negative factors like climate change, many different environmental pollutants and the reduction of oil resources give rise to increase the demand of biodegradable products over non-renewable resources. This book introduces a novel, cost effective and biodegradable filter; a so-called cellulose foam filter.

PB 9781536124378 £78.50 October 2017 Nova Science Publishers 200 pages

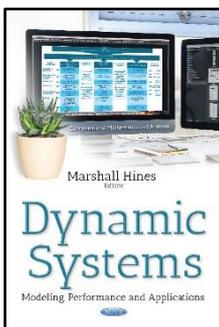


Characterizations of Recently Introduced Univariate Continuous Distributions (Mathematics Research Developments Series)

G G Hamedani, Mehdi Maadooliat

This monograph is, as far as the authors have gathered, the first one of its kind which presents various characterisations of many important and continuous distributions. It consists of six chapters. The first chapter lists cumulative distribution functions, probability density functions, hazard functions and reverse hazard functions of one hundred thirty-six important univariate continuous distributions. Chapter Two provides characterisations of these distributions based on the ratio of two truncated moments. Chapter Three takes up the characterisations of some of these distributions in terms of their hazard functions. Chapter Four deals with the characterisations of some of these distributions based on their reverse hazard functions. Characterisations of some of these distributions based on the conditional expectations of certain functions of the random variable are presented in Chapter Five.

HB 9781536122619 £219.50 October 2017 Nova Science Publishers 450 pages



Dynamic Systems Modeling, Performance & Applications (Computational Mathematics & Analysis / Mathematics Research Developments Series)

Edited by Marshall Hines

In the first chapter, Dr Christian Hugo Hoffmann presents a study that adds to the current knowledge on financial risk and complexity while drawing on the concept of organized complexity, coined by Weaver. He finishes by explaining the correlation between the ideas of complexity, randomness, and systemic risks. The second chapter presents a signal processing technique, which is a simplification of the dynamic element matching technique, or DEMA and is referred to as the dynamic system matching technique, or DSMT, for controlling the noise signal in the output of a system due to manufacturing errors. The third and final chapter defines new system models to describe the dynamicity of clusters and then, based on those models, they design and present an algorithm that is able to elect an eventual leader.

HB 9781536125573 £78.50 October 2017 Nova Science Publishers 116 pages

Mechanical Engineering & Materials Science

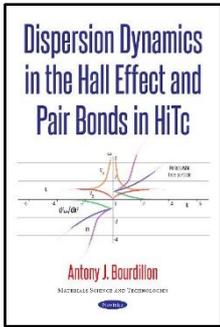


Advances in Materials Science Research Volume 30 (Advances in Materials Science Research Series)

Edited by Maryann C Wythers

This book provides readers with the latest developments in materials science research. In Chapter One various models more or less complex were proposed according to the simplifying assumptions that were made. Chapter Two provides the main classification and characteristics of composite materials with metal matrix. Analysed are the composites with metal matrix, specifically regarding to the matrix type, and type, the size and shape of reinforcements. Chapter Three reports on the research project on the effectiveness of geocell reinforced pavement, which included theoretical work with analytical solutions, numerical analyses with parametric study and experimental analyses with laboratory experimental tests and test field experiments. Chapter Four studies conditions for necking in neat polymers of different type and composites on their basis. Measurements have been made on polyethylene, which is a classical model polymer with simple molecular structure. Chapter Five reports on a method of modifying the polyester material to produce ion exchange fibre sorbents.

HB 9781536125061 £238.50 October 2017 Nova Science Publishers 237 pages

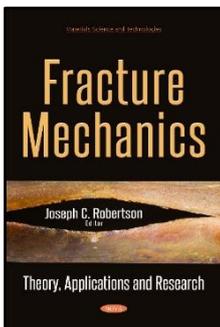


Dispersion Dynamics in the Hall Effect & Pair Bonds in HiTc (Materials Science & Technologies Series)

Antony J Bourdillon

Dispersion dynamics are developed from the stable wave packet in wave mechanics. They are used first in a physical treatment of creation and annihilation, and then applied to measurements in high temperature superconductivity. The dynamics require that the negative energy solution to relativity equations implies negative rest mass in the antiparticle. Dirac's positive mass for his first order equation is inconsistent with dispersion dynamics. The processing of the ceramic cuprates links the superconductivity not to the isotope effect, as in low temperature superconductors, but to chemical holes in the planar HiTc ceramics. The Hall coefficient is negative in the former case, but positive in the latter -- even though the Lorentz force can act on neither voids nor immobile ionic nuclei. Interpretation of the coefficient is an old anomaly. In fact, whether in metals, in p-type semiconductors or in HiTc ceramics, the carriers are all negatively charged. Dispersion dynamics show that the positive coefficient is a consequence of negative second derivatives in the dispersion of conduction bands in semiconductors, in certain metals and in high temperature superconductors. Existing data from HiTc compounds, especially data from processing, are reinterpreted to show how chemical and physical holes are formed.

PB 9781536125689 £78.50 October 2017 Nova Science Publishers 120 pages

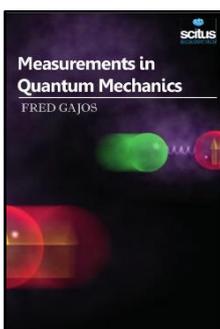


Fracture Mechanics Theory, Applications & Research (Materials Science & Technologies Series)

Edited by Joseph C Robertson

Classical fracture mechanics that emerged during the 1920s has gained popularity via LEFM from the 1940s to the 1960s. The principles of classical fracture mechanics evolved from experimental observation of the behaviour of glass that contains pre-existing cracks and is largely supported by physical reasoning. Chapter One presents a robust analysis of problems encountered in the field of pipeline networks and boiler components as a result of structural imperfection. Chapter Two deals with an analytical model of cracking, which is induced by thermal stresses in a porous multi-particle-matrix system. This system consists of spherical pores and isotropic spherical particles, which are both periodically distributed in an isotropic infinite matrix. Chapter Three reports on an analytical model of cracking in a multi-particle matrix system with isotropic whiskers, which are periodically distributed in an isotropic infinite matrix.

PB 9781536125009 £78.50 October 2017 Nova Science Publishers 124 pages

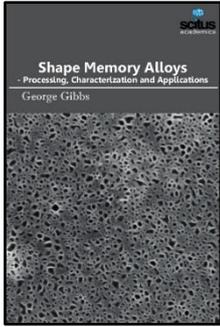


Measurements in Quantum Mechanics (Mechanical Engineering Series)

Fred Gajos

A measurement always causes the system to jump into an eigenstate of the dynamical variable that is being measured, the eigenvalue this eigenstate belongs to being equal to the result of the measurement. Measurement plays an important role in quantum mechanics, and it is viewed in different ways among various interpretations of quantum mechanics. Quantum mechanics is the branch of physics relating to the very small. It results in what may appear to be some very strange conclusions about the physical world. At the scale of atoms and electrons, many of the equations of classical mechanics, which describe how things move at everyday sizes and speeds, cease to be useful. In classical mechanics, objects exist in a specific place at a specific time. However, in quantum mechanics, objects instead exist in a haze of probability; they have a certain chance of being at point A, another chance of being at point B and so on. Perhaps quantum mechanics is viewed as the most remarkable development in 20th century physics. Each successful theory is exclusively concerned about "results of measurement". Quantum mechanics point of view is completely different from classical physics in measurement, because in microscopic world of quantum mechanics, a direct measurement as classical form is impossible.

HB 9781681173184 £160.99 January 2017 Scitus Academics 310 pages

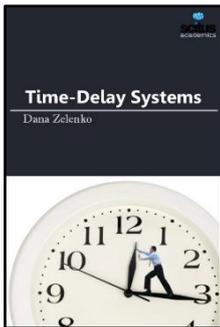


Shape Memory Alloys Processing, Characterization & Applications (Materials Engineering Series)

George Gibbs

Shape memory alloys have become in the past decades a well-established research subject. However, the complex relations between properties and structure have created a continuously growing interest for a deeper insight all this time. Shape memory alloys (SMAs) are metals that “remember” their original shapes. This book focuses on a wide range of topics from processing to the relationship between the structure and properties, as well as new applications. The many uses and applications of shape memory alloys ensure a bright future for these metals. Research is currently carried out at many robotics departments and materials science departments. With the innovative ideas for applications of SMAs and the number of products on the market using SMAs continually growing, advances in the field of shape memory alloys for use in many different fields of study seem very promising.

HB 9781681176444 £141.50 January 2017 Scitus Academics 276 pages



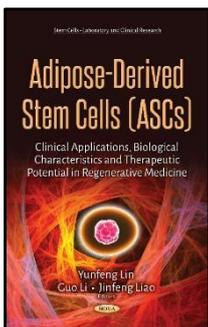
Time-Delay Systems (Mechanical Engineering Series)

Edited by Dana Zelenko

It is well known that, together with the increasing expectations of system dynamic performances, the delay information in practical systems or processes should not be neglected in the modelling procedure. Time delay is a very common phenomenon in the engineering world. In fact, many industrial processes include after effect phenomena in their inner dynamics. And actuators, sensors, and field networks that are involved in feedback loops usually introduce unavoidable delays. Time delays in dynamical systems arise as an inevitable consequence of finite speeds of information transmission. Realistic models increasingly demand the inclusion of delays in order to properly understand, analyse, design, and control real-life systems. Time delay is very often encountered in various technical systems, such as electric, pneumatic and hydraulic networks, chemical processes, long transmission lines, robotics, etc. So, the problem of controllability, observability, robustness, optimisation, adaptive control, pole placement and particularly stability and robustness stabilisation for this class of systems, has been one of the main interests for many scientists and researchers during the last five decades. Time-Delay Systems is concerned with the stability analysis and control problems of time-delay systems; a research field with at least six-decade long history that has been very active especially in the past two decades.

HB 9781681176574 £141.50 January 2017 Scitus Academics 276 pages

Medical

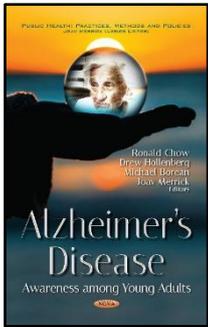


Adipose-Derived Stem Cells (ASCs) Clinical Applications, Biological Characteristics & Therapeutic Potential in Regenerative Medicine (Stem Cells -- Laboratory & Clinical Research Series)

Edited by Yunfeng Lin, Guo Li

Adipose-derived stem cells (ASCs) exist in adipose tissue and can differentiate into different embryonic layer cells and tissues in specific inductive conditions. The amount of ASCs in adipose tissue is much higher than that of bone marrow-derived stem cells. The adipose tissue is abundant in the subcutaneous tissue and easy to obtain. So, ASCs are considered a rich source of adult stem cells. In addition, ASCs do not express the major histocompatibility complex, Class II, suggesting that ASCs not only are suitable for autologous transplantation, but also have potential in allogeneic transplantation. Due to the rich origins, multilineage differentiation potential and immune tolerance, ASCs have been playing a significant role in the development and application of tissue engineering in recent years. In this book, the authors focus on the biological characteristics, clinical applications and therapeutic potential in regenerative medicine of ASCs.

HB 9781536123937 £152.50 September 2017 Nova Science Publishers 169 pages

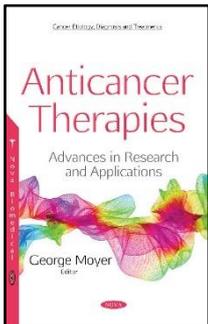


Alzheimer's Disease
Awareness Among Young Adults
(Public Health: Practices, Methods & Policies Series)

Edited by Ronald Chow, Drew Hollenberg, Michael Borean, Joav Merrick

Alzheimer's disease will become more prevalent in the upcoming decades. With no cure on the horizon, it is important that close relatives and family members of affected patients become knowledgeable about the disease; they can be more conscientious caregivers and improve quality of life. Awareness and knowledge of the disease are especially important for the young adult population, as they will be heavily relied upon in the future to care for those with the disease. In this book, we present studies that looked into the awareness level of young adults by geographical location, age, sex, and familial ties to the disease.

HB 9781536124569 £185.99 October 2017 Nova Science Publishers 215 pages

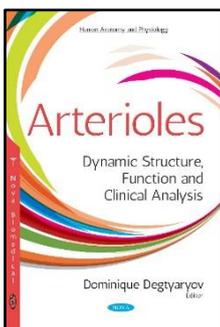


Anticancer Therapies
Advances in Research & Applications
(Cancer Etiology, Diagnosis & Treatments Series)

Edited by George Moyer

The first chapter examines the synergistic processes of herbal ingredients in order to help researchers discover new phytomedicines. The second chapter gives a synopsis of the discussion regarding the cure of developed prostate cancer by using androgen deprivation therapy. Diethylstilbestrol was previously used to achieve androgen deprivation, but luteinising hormone-releasing hormone (LHRH) replaced it and a slew of detrimental effects ensued. Unconventional therapy has been implemented to decrease the adverseness of treatment. The third chapter elaborates on the risk factors of breast cancer, such as early menarche and late menopause. In the fourth chapter, he discusses the impact of synthetic peptides in liver cancer management. The fifth chapter discusses the use of a hepatic sgRNA or single guide RNA delivery system to target a large proportion of gene sets to induce the hepatocellular carcinoma (HCC) and intra-hepatic cholangio-carcinoma (ICC), concluding that the CRISPR/Cas9 gene targeting could be used to manage HCC, the predominant cause of cancer-related deaths. In the sixth chapter the decrease in potential risk of cancer via blockers of IGF-1R in prostate and colon carcinomas and use of anti-IGF therapy in grouping of cytotoxic drugs is examined. The seventh chapter explores the potential for telomere, or its enzyme, to be used as a target drug or in the screening process for treatment of cancer. Chapter eight examines how CK-19 helps to differentiate papillary thyroid carcinomas from other malignant and benign forms. Chapter nine analyses the distinctive biological properties of Nanoparticles.

HB 9781536126112 £152.50 October 2017 Nova Science Publishers 154 pages

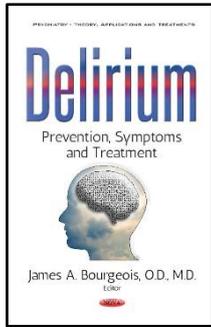


Arterioles
Dynamic Structure, Function & Clinical Analysis
(Human Anatomy & Physiology Series)

Edited by Dominique Degtyaryov

The knowledge of the morphofunctional features from the coronary microcirculation is essential for understanding its role in cardiac physiological work and in the pathogenesis of coronary microvascular dysfunction (CMD). The cardiovascular system comprises the heart and blood vessels, including arteries, veins, and capillaries, both systemic and pulmonary. Arterioles are the primary site of vascular resistance and have only one to two layers of smooth muscular walls. Chapter One will provide an overview of the coronary microcirculation, its functions and regulatory mechanisms. The purpose of Chapter Two is to understand the role of arteriolar endothelial dysfunction in CVDs and its underlying mechanisms. Chapter Three will explore the physiopathology, epidemiology, and the diagnosis and treatment of hypertensive retinopathy. Chapter Four reports on angiogenesis, a critical process for reproduction in mammals, which consists of arterioles and blood vessels formation from the existing ones.

PB 9781536125092 £78.50 October 2017 Nova Science Publishers 106 pages

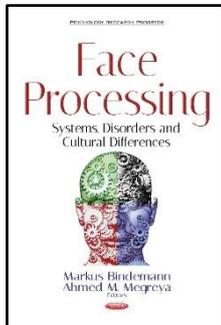


Delirium
Prevention, Symptoms & Treatment
(Psychiatry -- Theory, Applications & Treatments Series)

James A Bourgeois

Includes eleven chapters that have been prepared using state-of-art methodologies by professional researchers from ten countries. The chapters in the book comprise the following titles: "System Diagnostics and Prognostics: A Review"; "Random Vibro-Impact Vibration in Mechanical Systems"; "The Machine for Cutting Cane and Other Aquatic Plants in Navigable Waterways by Agustín de Betancourt y Molina": Analysis by Computer-Aided Engineering Techniques with an Autodesk Inventor Professional"; "Mechanical Systems and Microfluidics: The Application of a Vision System in the Testing of Fluids Behavior"; "The Study of Limited Invariant Sets and Structures of Relay Stabilized Systems"; "Finding an Unbiased Warranty Length for a Product Under Parametric Uncertainty of Underlying Lifetime Models"; "Modeling of Mechanical Aspects' (Static, Dynamic) Influence on the Production of Electric Fuel Cell (PEMFC) Power"; "Quantum Graph-Type Models of the Helmholtz Resonator and Completeness of Resonance States"; "Applied Research in Forensic Engineering"; "Energy Efficiency via a Turbulator"; and "A Mathematical Model of a Rocket Engine for Reliability Analysis".

HB 9781536123852 £185.99 September 2017 Nova Science Publishers 268 pages

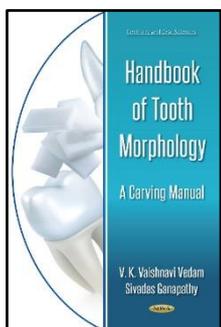


Face Processing
Systems, Disorders & Cultural Differences
(Human Anatomy & Physiology Series)

Edited by Markus Bindemann, Ahmed M Megreya

Face processing is now a mainstream, multi-faceted and global research field in psychology, and it is growing exponentially. The volume of emerging research necessitates continuous efforts to update our overall understanding of current theory. This book brings together contributions from face processing researchers around the world to provide up-to-date reviews of topics of great current interest. The book is partitioned to give insight into face processing systems, such as those employed to verify a person's identity in applied security settings, the state-of-the-art systems utilised for the construction of criminal facial composites in police investigations, and the cognitive systems for the recognition of familiar faces and bodies; disorders, focusing on people with extremely high and extremely poor face processing ability, as well as face processing in autism spectrum disorder; and cultural differences, including the development of perceptual and social race biases, the impact of cultural headdress traditions and reading directions on face perception, cultural similarities and differences in the processing of facial expressions, as well as a broader look at ethnicity, gender and age biases in face processing.

HB 9781536123982 £152.50 September 2017 Nova Science Publishers 410 pages

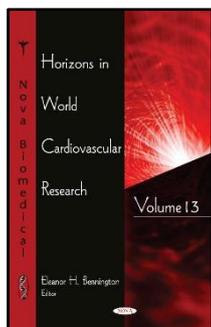


Handbook of Tooth Morphology
A Carving Manual (Dentistry & Oral Sciences Series)

V K Vaishnavi Vedam, Sivadas Ganapathy

This book has been written with the requirements for students pursuing undergraduate and postgraduate dentistry courses in mind. To the authors' knowledge, several standard tooth morphology books are available; however, the numerous voluminous texts becomes difficult for students to utilise during examination preparation. Therefore, this concise book (although never intended to replace standard textbooks) acts as a fast revision tool and describes examination oriented questions, emphasising in-depth morphological aspects and carving steps for each permanent tooth in this subject on a single platform. Thus this book enlightens the target audience in a simple, logical and well-structured manner, compiled from information found within all standard textbooks of this field. It promotes and enables focused learning on the topic by sharing essential information from the basics to the level of postgraduate students pursuing specialised courses in dentistry.

HB 9781536123678 £152.50 September 2017 Nova Science Publishers 250 pages

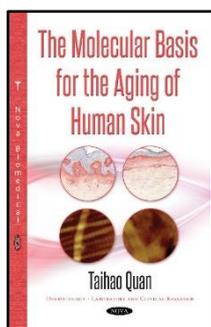


Horizons in World Cardiovascular Research Volume 13 (Horizons in World Cardiovascular Research Series)

Edited by Eleanor H Bennington

Chapter one discusses how earlier detection of CRS type 1 by renal and cardiac biomarkers theoretically leads to improved outcomes in patients with acute heart disorders. Chapter two analyses the most recent discoveries concerning the role of metformin in cardiovascular/renal pathologies while simultaneously discussing the therapeutic potential of metformin in the treatment of patients with diabetes-associated cardiovascular/renal diseases. Helen Senderovich, Justin Chow and Shaira Wignarajah present a case study regarding end-of-life care in advanced congestive heart failure in chapter three, discussing symptom management and patients' feelings in chapter three. Chapter four discusses methodology for abnormal heartbeat recognition and classification. Next, Chapter five presents a study wherein the effects of electrode material and size on the skin-electrode impedance were investigated, in addition to the influence of thickness of the filled sponge and environmental factors. Chapter six presents another study wherein 300 patients without known coronary artery disease underwent coronary computed tomographic angiography, studying calcium scores of and the relationship amongst them. Chapter seven provides a review of etiopathogenetic mechanisms of cochlear endothelial dysfunction and cochlear microvascular disease. Chapter eight presents an investigation on the mechanism of sugar influence in gelatine. Chapter nine continues with an analysis of the neutrino halo from a working human heart.

HB 9781536124828 £238.50 October 2017 Nova Science Publishers 173 pages

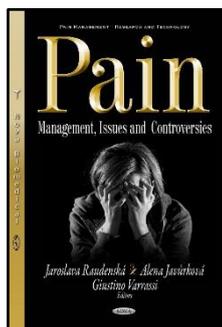


The Molecular Basis for the Aging of Human Skin (Dermatology -- Laboratory & Clinical Research Series)

Edited by Taihao Quan

Skin is the most voluminous connective tissue of the body. Skin, like all other human organs, undergoes progressive alterations as a consequence of the passage of time (natural aging). However, human skin, unlike other organs, continuously experiences harmful exposure from environmental sources such as solar ultraviolet irradiation (photoaging). As the bulk of the skin is largely comprised of connective tissue collagen, the primary molecular features of aged human skin are reduced production of collagen and accumulation of damaged collagen. Age-related alterations of dermal connective collagen cause an aberrant tissue microenvironment, which deleteriously influence the risk of developing age-related skin diseases. This book comprehensively describes the molecular mechanisms of human skin connective tissue aging by emphasizing age-related dermal microenvironment as a strategy for improving our quality of life as well as for preventive and therapeutic intervention of age-related skin diseases.

HB 9781536124682 £152.50 October 2017 Nova Science Publishers 240 pages

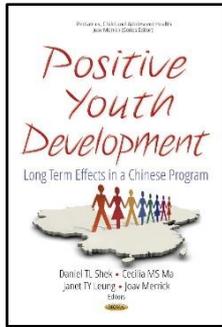


Pain Management, Issues & Controversies (Pain Management -- Research & Technology Series)

Edited by Jaroslava Raudenská, & Giustino Varrassi

This book provides a view of some problems encountered in the treatment of pain (mainly chronic, non-cancer pain and certainly not an exhaustive view). To cover all the debatable questions and controversies would be almost impossible. We have emphasised that the problem of treating pain is much wider than we are used to thinking. In fact, it has social, behavioral and biopsychosocial aspects. The book is primarily intended for physicians and specialists engaged in the treatment of patients with pain. It will also certainly be interesting for other healthcare professionals who work with pain patients such as psychologists (both clinical and researching), physiotherapists, nurses, social workers and others. It can also be used as a basis for a course on pain treatment for undergraduate students, as well as for the postgraduate education of pain treatment specialists. A variety of authors have composed the different chapters as they are from different specialties of medicine. All of them are extremely well-known in terms of their scientific interests in the field of pain management.

HB 9781536122022 £219.50 September 2017 Nova Science Publishers 415 pages



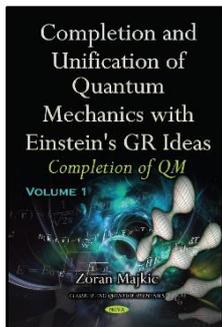
Positive Youth Development Long Term Effects in a Chinese Program (Pediatrics, Child & Adolescent Health Series)

Edited by Daniel T L Shek, Cecilia M S Ma, Janet T Y Leung, Joav Merrick

Adolescent developmental issues are growing globally; studies show that the percentage of adolescent mental health issues such as depression and suicide continues to escalate. Adolescent addiction problems such as substance abuse, pathological gambling and Internet addiction are intensifying. Furthermore, interpersonal problems such as violence and bullying have grown in different forms, particularly in view of the growing development of social media such as Facebook. In many studies, it was estimated that around one-fifth of adolescents may require professional help because of their psychosocial problems. In this book, the authors present the first known scientific study on the psychosocial development in Chinese adolescents in Hong Kong. A large sample was used and validated measures of positive youth development, family functioning, parent-child relational processes and adolescent risk behaviour were included in the study.

HB 9781536125399 £219.50 October 2017 Nova Science Publishers 345 pages

Physics

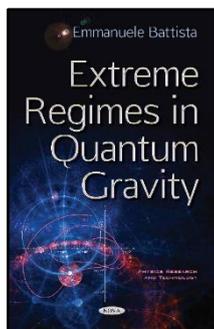


Completion & Unification of Quantum Mechanics with Einstein's GR Ideas Part I -- Completion of QM (Classical & Quantum Mechanics Series)

Zoran Majkic

This unique manuscript presents a novel approach to QM by modelling an elementary particle via 3D matter/energy density, which propagates in the open time-space continuum as a rest mass energy density wave packet. This simple idea is based on the fact that any macroscopic object of mass M that occupies a finite 3D volume V can be represented by an energy-density contained in V , so that the integration of this energy-density over V provides the total energy $E = Mc^2$. This new theory is fully integrated with the theory of relativity, and completes the quantum theory of Einstein by overcoming the Copenhagen interpretation. The newly introduced partial differential equations describe the relativistic phenomena and, generally, the dependence of a particle's geometrical form (its internal matter distribution) on its velocity and acceleration. A number of well-known physical principles are obtained as derived results of this theory, and are consolidated by a number of detailed examples. Part I, which is dedicated to the completion of QM, is composed of five Chapters. In the first two chapters, the nucleus is analysed in terms of the material discussed. Chapter Three is dedicated to the development of the Lagrangian density for the complex wave packets of the rest mass energy density of an elementary particle, and to the new quantum field theory. The authors obtained the set of new non-Hamiltonian TSPF quantum operators, parameterised by the vector velocity field of energy density with corresponding Hilbert spaces for accelerated particles, and these were valid in any (infinitesimal) local Minkowski time-space. The main results are the new differential equations obtained as conservation laws for Noether currents and Euler-Lagrange equations, which express the exact form of the complex terms used in the differential equations in Chapters One and Two, and introduce the most useful concept of the velocity for any infinitesimal amount of the energy density flux of a particle (the hidden variables). In Chapter Four, a gauge theory and a new explanation of the mass gap conjecture in Yang-Mills theory and of the Higgs mechanism without necessity of the new Higgs field and its bosons, along with a new explanation of double-slit experiments are presented. Thus, the authors obtained a conservative extension of current probabilistic/statistic QM valid for an ensemble of particles, each individual particle, and which is deterministic and compatible by classical mechanics.

HB 9781536119466 £219.50 June 2017 Nova Science Publishers 445 pages

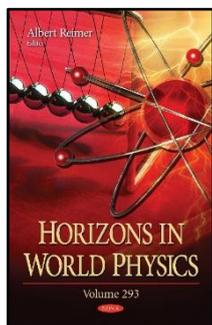


Extreme Regimes in Quantum Gravity (Construction Materials & Engineering Series)

Emmanuele Battista

This book is divided into two parts. The low-energy limit of quantum gravity is analysed in the first half of the book, whereas in the second half of the book, the authors explain the high-energy domain. In the first part, by applying the effective field theory point of view to the quantisation of general relativity, detectable, though tiny, quantum effects in the position of Newtonian Lagrangian points of the Earth-Moon system are found. In order to make more realistic the quantum corrected model proposed, the full three-body problem where the Earth and the Moon interact with a generic massive body as well as the restricted four-body problem involving the perturbative effects produced by the gravitational presence of the Sun in the Earth-Moon system are also studied. After that, a new quantum theory having general relativity as its classical counterpart is analysed. By exploiting this framework, an innovative interesting prediction involving the position of Lagrangian points within the context of general relativity is described. Furthermore, the new pattern provides quantum corrections to the relativistic coordinates of Earth-Moon libration points of a few millimetres. The second part of the book deals with the Riemannian curvature characterising the boosted form assumed by the Schwarzschild-de Sitter metric. The analysis of the Kretschmann invariant and the geodesic equation shows that the spacetime possesses a “scalar curvature singularity” within a 3-sphere and that it is possible to define what the authors refer to as a “boosted horizon”, which is a sort of elastic wall where all particles are surprisingly pushed away, suggesting that such “boosted geometries” are ruled by a sort of “antigravity effect”. Eventually, the equivalence with the coordinate shift method is invoked in order to demonstrate that all R^2 terms appearing in the Riemann curvature tensor give a vanishing contribution in the distributional sense. The second part of the book deals with the Riemannian curvature characterising the boosted form assumed by the Schwarzschild-de Sitter metric.

HB 9781536123364 £185.99 September 2017 Nova Science Publishers 278 pages

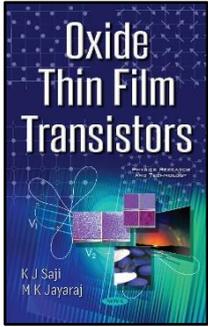


Horizons in World Physics Volume 293 (Horizons in World Physics Series)

Edited by Albert Reimer

In chapter one, M V Abramov, A P Kussyak, O M Kaminskiy, S P Turanska, A L Petranovska, N V Kussyak, and P P Gorbyk present research aimed at the progression of the concept for the development of magnetosensitive nanocomposites with multilevel hierarchical nanoarchitecture and functions of biomedical nanorobots. Afterwards, A Zubow, K Zubow and V A Zubow propose a mechanism for the photoelectric effect based on gravity in chapter two, with the photoelectric effect being modelled by shifting the equilibrium. In chapter three, Kouichi Nakagawa studies the potential use of a sucrose dosimeter to estimate linear energy transfer and absorbed dose of heavy ion and X-ray radiation. In chapter four, Xiaoping Sun, PhD explores the electron paramagnetic resonance of various charge-transfer reactions giving radical pairs. Next, in chapter five, A L Gyulbudaghian concludes that the radial systems of dark globules are of two types based on surveys of the northern and southern hemispheres. In chapter six, Lorenzo Zaninetti presents research using a thermal model and a second cold model, comparing both with the results of numerical hydro-dynamics. In chapter seven, Michael L. Smith and Ahmet M. Öztürk present findings that a marginally modified Schwarzschild relationship foretells the nature of gravitational attraction by subatomic and atomic particles. In chapter eight, Janusz Garecki summarises past articles on gravitational radiation wherein it has been shown that the real gravitational waves possessing a non-vanishing Riemann tensor constantly carry energy-momentum. Lastly, in chapter nine, Daria A Tretyakova, Ph.D. and Tibur M Daye examine null geodesics for the scalar-tensor black holes in the Horndeski non-minimal kinetic coupling framework.

HB 9781536125115 £238.50 October 2017 Nova Science Publishers 196 pages

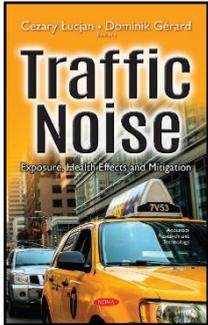


Oxide Thin Film Transistors (Physics Research & Technology Series)

K J Saji

Each chapter was written independently, and the book structure is designed so that they complement each other, even though they can be read independently. Each chapter was reviewed in a double-blind peer review process. The editors thank the kind and helpful contribution of the advisers to the book's structure and coherence, and the reviewers for their work and the useful suggestions for each chapter.

HB 9781536123739 £152.50 October 2017 Nova Science Publishers 150 pages



Traffic Noise

Exposure, Health Effects & Mitigation (Acoustics Research & Technology Series)

Edited by Cezary Łucjan, Dominik Gérard

In the book's opening chapter, Nefta Eleftheria Votsi, Ph.D., Athanasios Kallimanis, Ph.D., and Ioannis Pantis, Ph.D. methodically review present collected works to clarify Quiet Areas categories to identify research gaps and establish guidelines for the addition of Quiet Areas initiatives in cohesive environmental management approaches. Next, Angel M Dzhambov, MD and Donka D Dimitrova, Ph.D. examine the risk of hypertension connected to road traffic noise exposure in different ethnic groups in Bulgaria. Supplementing this, Hussein M Elmehdi, Ph.D. discusses noise exposure and related health risks with the goal to connect the results of measured noise exposures to sleep disturbance and annoyance. Angel M Dzhambov, MD proves a review of literature on traffic noise reduction by vegetation. Ending the book, David Isaac Ibarra Zarate gives an overview of the issue of road traffic noise while also presenting possible solutions.

HB 9781536125504 £185.99 October 2017 Nova Science Publishers 241 pages



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