Kasturi Textbook Of Pharmaceutical Ysis

This book examines the role of Hindu-inspired faith movements (HIFMs) in contemporary India as actors in social transformation. It further situates these movements in the context of the global political economy where such movements cross national boundaries to locate believers among the Hindu diaspora and others. In contemporary neoliberal India, HIFMs have become important actors, and they realize themselves by making public assertions through service. The four pillars of the contemporary presence of such movements are: gurus, sociality, hegemony and social transformation. Gurus, who spearhead these movements, create a matrix of possible meanings in their public discourses which their followers pick up to create messages of personal and social change. Sociality is a core strategy of

proliferation across such movements and implies social service, which is qualified by memories of the guru and what they are believed to embody. Hegemony is reflected in the fact that social service in such movements often ominously imbibes right-wing or far-right Hinduism. They propose a model of Hindu-inspired social transformation, involving faith building into and transforming the civil society. The book discusses in a nuanced way several Hindu-inspired faith movements of various hues which have made national and international impact. This topical book is of interest to students and researchers in the fields of sociology, anthropology, social work, and social psychology, with a special interest in the study of religious movements.

Advanced materials and nanotechnology is a promising, emerging field involving the use of nanoparticles to facilitate the detection of various

physical and chemical parameters, including temperature, humidity, pH, metal ion, anion, small organic or inorganic molecules, gases, and biomolecules responsible for environmental issues that can lead to diseases like cancer, diabetes, osteoarthritis, bacterial infections, and brain, retinal, and cardiovascular diseases. By monitoring environmental samples and detecting these environmental issues, advanced nanotechnology in this type of sensory technology is able to improve daily quality of life. Although these sensors are commercially available for the detection of monovalent cations, anions, gases, volatile organic molecules, heavy metal ions, and toxic metal ions, many existing models require significant power and lack advanced technology for more quality selectivity and sensitivity. There is room in these sensors to optimize their selectivity, reversibility, on/off ratio, response time, and their environmental stability in real-world

operating conditions. This book explores the methods for the development and design of environmentally-friendly, simple, reliable, and cost effective electrochemical nanosensors using powerful nanostructured materials. More specifically, it highlights the use of various electrochemical-based biosensor sensors involved in the detection of monovalent cations, anions, gases, volatile organic molecules, heavy metal ions, and toxic metal ions, with the ultimate goal of seeing these technologies reach market.

A comprehensive guide that covers the banana ' s full value chain – from production to consumption The banana is the world ' s fourth major fruit crop. Offering a unique and in-depth overview of the fruit ' s entire value chain, this important new handbook charts its progression from production through to harvest, postharvest, processing, and consumption. The most up-to-date data and best

practices are drawn together to present guidelines on innovative storage, processing, and packaging technologies, while fresh approaches to quality management and the value-added utilization of banana byproducts are also explained. Additionally, the book examines the banana ' s physiology, nutritional significance, and potential diseases and pests. The book also Edited by noted experts in the field of food science, this essential text: Provides a new examination of the world ' s fourth major fruit crop Covers the fruit ' s entire value chain Offers dedicated chapters on bioactive and phytochemical compounds found in bananas and the potential of processing byproducts Gives insight into bananas ' antioxidant content and other nutritional properties Identifies and explains present and possible effects of bioactive and phytochemical compounds Handbook of Banana Production, Postharvest Science, Processing Technology, and

Nutrition offers the most far-reaching overview of the banana currently available. It will be of great benefit to food industry professionals specializing in fruit processing, packaging, and manufacturing banana-based products. The book is also an excellent resource for those studying or researching food technology, food science, food engineering, food packaging, applied nutrition, biotechnology, and more.

This book constitutes refereed proceedings of the First International Conference on Smart Technologies, Systems and Applications, held in Quito, Ecuador, in December 2019. The 27 full papers and 3 short papers presented were carefully reviewed and selected from 90 submissions. The papers of this volume are organized in topical sections on smart technologies; smart systems; smart trends and applications.

Vessel Health and Preservation: The Right Approach for Vascular Access
Making Global Reproductive Medicine in Postcolonial India
Global Health Governance and Policy
Complementary & Alternative Therapies in Nursing
Principles and Applications
The Diagnosis and Treatment of Male Infertility
Smart Cameras

This book introduces a variety of advanced machine learning approaches covering the areas of neural networks, fuzzy logic, and hybrid intelligent systems for the determination and diagnosis of cancer. Moreover, the tactical solutions of machine learning have proved its vast range of significance and, provided

novel solutions in the medical field for the diagnosis of disease. This book also explores the distinct deep learning approaches that are capable of yielding more accurate outcomes for the diagnosis of cancer. In addition to providing an overview of the emerging machine and deep learning approaches, it also enlightens an insight on how to evaluate the efficiency and appropriateness of such techniques and analysis of cancer data used in the cancer diagnosis. Therefore, this book focuses on the recent advancements in the machine learning and deep learning approaches used in the diagnosis of different types of cancer along with their research challenges and future directions for the targeted audience including scientists, experts, Ph.D.

students, postdocs, and anyone interested in the subjects discussed.

Until recently, the chemical industry has been dominated by the manufacture of bulk commodity chemicals such as benzene, ammonia, and polypropylene. However, over the last decade a significant shift occurred. Now most chemical companies devote any new resources to the design and manufacture of specialty, high value-added chemical products such as pharmaceuticals, cosmetics, and electronic coatings. Although the jobs held by chemical engineers have also changed to reflect this altered business, their training has remained static, emphasizing traditional commodities. This ground-

breaking text starts to redress the balance between commodities and higher value-added products. It expands the scope of chemical engineering design to encompass both process design and product design. The authors use a four-step procedure for chemical product design - needs, ideas, selection, manufacture - drawing numerous examples from industry to illustrate the discussion. The book concludes with a brief review of the economic issues. Chemical engineering students and beginning chemical engineers will find this text an inviting introduction to chemical product design.
Global Health Governance and Policy outlines the fundamentals of global health, a key element of sustainable development. Taking an interdisciplinary

approach, it explores the relationship between the globalization process and global health ' s social, political, economic and environmental determinants. It points the attention to the actors and forces that shape global policies and actions with an impact on peoples ' health in an increasingly complex global governance context. Topics discussed include: The relationship between globalization and the determinants of health The essentials of global health measurements The evolution of public health strategies in the context of the global development agenda The actors and influencers of global health governance The role of health systems The dynamics and mechanisms of global health financing and Development Assistance for Health

Career opportunities in global health governance, management and policy Looking in depth at some of the more significant links between neoliberal globalization, global policies and health, Global Health Governance and Policy: An Introduction discusses some specific health issues of global relevance such as changes in the ecosystem, epidemics and the spread of infectious diseases, the global transformation of the food system, the tobacco epidemic, human migration, macroeconomic processes and global financial crisis, trade and access to health services, drugs and vaccines, and eHealth and the global "health 4.0" challenge. Written by a team of experienced practitioners, scientists and teachers, this textbook is ideal for students of all levels and

professionals in a variety of disciplines with an interest in global health.

This book presents a holistic view of the complex and dynamic responses of plants to nanoparticles, the signal transduction mechanisms involved, and the regulation of gene expression. Further, it addresses the phytosynthesis of nanoparticles, the role of nanoparticles in the antioxidant systems of plants and agriculture, the beneficial and harmful effects of nanoparticles on plants, and the application of nanoparticles and nanotubes to mass spectrometry, aiming ultimately at an analysis of the metabolomics of plants. The growing numbers of inventions in the field of nanotechnology are producing novel applications in

the fields of biotechnology and agriculture. Nanoparticles have received much attention because of the unique physico-chemical properties of these compounds. In the life sciences, nanoparticles are used as “smart” delivery systems, prompting the Nobel Prize winner P. Ehrlich to refer to these compounds as “magic bullets.” Nanoparticles also play an important role in agriculture as compound fertilizers and nano-pesticides, acting as chemical delivery agents that target molecules to specific cellular organelles in plants. The influence of nanoparticles on plant growth and development, however, remains to be investigated. Lastly, this book reveals the research gaps that must be bridged in the years to come in order to achieve

larger goals concerning the applications of nanotechnology in the plants sciences. In the 21st century, nanotechnology has become a rapidly emerging branch of science. In the world of physical sciences, nanotechnological tools have been exploited for a broad range of applications. In recent years, nanoparticles have also proven useful in several branches of the life sciences. In particular, nanotechnology has been employed in drug delivery and related applications in medicine.

Rehabilitation Research - E-Book

Hemostasis and Thrombosis

Toxicity and Solutions

A Case-Based Guide for Clinicians

Nanoparticles and Their Impact on Plants
The Indigenous Drugs of India
Chemical Product Design

This book details the biology of urologic cancers with emphasis on clinical management of these diseases. Surgical radiation therapies and radical treatment are discussed and 'how-to' methods of treatment are presented. Risk factors, screening and diagnostic approaches for each cancer are provided.

This volume describes the identification of emerging organic pollutants, mainly from industrial sources, their associated toxicological threats, and the latest green methods and biotechnological solutions to abate harmful impacts on people and the environment. The chapters present reviews on

current applied toxicology research, occupational health hazards and green remedial solutions for pollution control in terrestrial and aquatic environments, with the aim of raising public awareness of these issues and providing chemists, toxicologists and environmental scientists with the knowledge to combat organic pollutants through sustainable means. Readers will learn about the multi-dimensional applications of materials and processes which harvest energy out of environmental remediation technologies, as well as the roles of biotechnology and nanotechnology in addressing high pollutant load. Specific attention is paid to technologies that draw energy through wastewater remediation, as this covers the primary means by which organic pollutants are introduced into the environment from industry and other sources. The

book will be of use to pollution control boards, industry regulators, and students and researchers in the fields of biotechnology, biomedical science, hydrology and water chemistry.

Print+CourseSmart

This essential work, edited by two researchers at London's famous Queen Mary's medical school targets one of the most important areas in medical development today. These days, antibody therapeutics are the treatment of choice for several autoimmune and oncological conditions. They are, indeed, becoming the molecules of choice for further combination therapies and cell engineering. In this timely work, a slew of expert in the field of drug development summarize all the current developments and clinical

successes.
India's Reluctant Urbanization
ICICCS 2020
Topology-Based Methods in Visualization II
Urologic Cancer
Seventh Edition
Electronic Systems and Intelligent Computing
Substantial Relations

Through a close examination of India's policies, economic system, social systems and politics, this study explores the numerous perspectives and debates on India's urbanization. The authors link contemporary urban issues with emerging challenges associated with policies and city

management.
Rapidly increasing aging population and environmental stressors are the two main global concerns of increasing incidence of a variety of pathologies in the modern society. The complex etiologies and pathologies cause major challenges to disease treatment. On the other hand, several herbs are known for their health-caring and disease-curing activities. Ashwagandha, a popular herb in Indian traditional home medicine, Ayurveda, has gathered increasing recognition in recent years when the chemically synthesized drugs for single target therapies showed limited success and adverse toxic effects.

Ashwagandha is known as a powerful adaptogen and trusted to enhance function of the brain, reproductive system, cell-mediated immunity and increase the body's defense against disease, and possess anti-inflammatory, anticancer and anti-arthritic activities. In this book, for the first time, we provide a complete portrait on scientific understanding of the effects of Ashwagandha and its active principles for a variety of preventive and therapeutic activities.

This book gathers a collection of high-quality peer-reviewed research papers presented at International Conference on Cyber Intelligence and Information

Retrieval (CIIR 2021), held at Institute of Engineering & Management, Kolkata, India during 20 – 21 May 2021. The book covers research papers in the field of privacy and security in the cloud, data loss prevention and recovery, high-performance networks, network security and cryptography, image and signal processing, artificial immune systems, information and network security, data science techniques and applications, data warehousing and data mining, data mining in dynamic environment, higher-order neural computing, rough set and fuzzy set theory, and nature-inspired computing techniques.

This case-based guide is written from the clinician's

perspective, dealing with a defined male infertility problem, tracing the actual clinical pathway arriving at the diagnosis, and discussing the treatment options and the likely outcome. Rather than focusing on excessive theoretical details, each chapter presents a unique clinical vignette or scenario, the relevant aspects of which are followed throughout the entire chapter, correlating specific fertility issues with clinical findings, describing treatment options, prognoses and procedures (when indicated), and concluding with practical clinical pearls. Opening with chapters describing current diagnoses of male infertility and semen analysis, the subsequent cases

presented cover a variety of relevant topics in male infertility, including anabolic steroid use, ejaculatory and erectile dysfunction, azoospermia, Klinefelter Syndrome, varicocele, cystic fibrosis and spinal cord injury. Additional chapters discuss choosing the right assisted conception technique and developing and managing a sperm bank. Practical and illustrative of a wide array of male fertility issues, The Diagnosis and Treatment of Male Infertility is a go-to resource for clinical andrologists, reproductive endocrinologists, urologists, primary care physicians and any professional working to treat the infertile male.

Nutrition and Immunity
Proceedings of CIIR 2021
Guru Charisma in Contemporary India
Faith Movements and Social Transformation
Therapeutic Antibodies
Inorganic Medicinal and Pharmaceutical Chemistry
Therapeutic Enzymes: Function and Clinical Implications

Following an introduction to biogenic metal nanoparticles, this book presents how they can be biosynthesized using bacteria, fungi and yeast, as well as their potential applications in biomedicine. It is shown that the synthesis of nanoparticles using microbes

is eco-friendly and results in reproducible metal nanoparticles of well-defined sizes, shapes and structures. This biotechnological approach based on the process of biomineralization exploits the effectiveness and flexibility of biological systems. Chapters include practical protocols for microbial synthesis of nanoparticles and microbial screening methods for isolating a specific nanoparticle producer as well as reviews on process optimization, industrial scale production, biomolecule-nanoparticle interactions, magnetosomes, silver nanoparticles and their numerous applications

in medicine, and the application of gold nanoparticles in developing sensitive biosensors.

Visualization research aims to provide insight into large, complicated data sets and the phenomena behind them. While there are di?erent methods of reaching this goal, topological methods stand out for their solid mathem- ical foundation, which guides the algorithmic analysis and its presentation. Topology-based methods in visualization have been around since the beg- ning of visualization as a scienti?c discipline, but they initially played only a minor role. In

recent years,interest in topology-basedvisualization has grown andsigni?cantinnovationhasledto newconceptsandsuccessfulapplications. The latest trends adapt basic topological concepts to precisely express user interests in topological properties of the data. This book is the outcome of the second workshop on Topological Methods in Visualization, which was held March 4–6, 2007 in Kloster Nimbschen near Leipzig,Germany.Theworkshopbroughttogeth ermorethan40international researchers to present and discuss the state of the art and new trends in the ?eld of topology-based

visualization. Two inspiring invited talks by George Haller, MIT, and Nelson Max, LLNL, were accompanied by 14 presentations by participants and two panel discussions on current and future trends in visualization research. This book contains thirteen research papers that have been peer-reviewed in a two-stage review process. In the ?rst phase, submitted papers where peer-reviewed by the international program committee. After the workshop accepted papers went through a revision and a second review process taking into account comments from the ?rst round and discussions at the workshop. Abouthalfthepape

rsconcerntopology-basedanalysisandvisualizationof ?uid?owsimulations;twopapersconcernmoregeneraltopologicalalgorithms, while the remaining papers discuss topology-based visualization methods in application areas like biology, medical imaging and electromagnetism.

This book discusses various aspects of graphene fictionalization strategies from inorganic oxides and organic moieties including preparation, design, and characterization of functionalization material and its applications. Including illustrations and tables summarizing the

latest research on manufacturing, design, characterization and applications of graphene functionalization, it describes graphene functionalization using different techniques and materials and highlights the latest technologies in the field of manufacturing and design. This book is a valuable reference resource for lecturers, students, researchers and industrialists working in the field of material science, especially polymer composites.

This Open access book offers updated and revised information on vessel health and preservation (VHP), a model concept first

published in poster form in 2008 and in JVA in 2012, which has received a great deal of attention, especially in the US, UK and Australia. The book presents a model and a new way of thinking applied to vascular access and administration of intravenous treatment, and shows how establishing and maintaining a route of access to the bloodstream is essential for patients in acute care today. Until now, little thought has been given to an intentional process to guide selection, insertion and management of vascular access devices (VADs) and by default actions are based on crisis management when a

quickly selected VAD fails. The book details how VHP establishes a framework or pathway model for each step of the patient experience, intentionally guiding, improving and eliminating risk when possible. The evidence points to the fact that reducing fragmentation, establishing a pathway, and teaching the process to all stakeholders reduces complications with intravenous therapy, improves efficiency and diminishes cost. As such this book appeals to bedside nurses, physicians and other health professionals.

Science of Ashwagandha: Preventive and

Therapeutic Potentials
Short Descriptive Notices of the Principal Medicinal Products Met with in British India
Essential Aspects of Immunometabolism in Health and Disease
Proceedings of ESIC 2020
Smart Technologies, Systems and Applications
Proceedings of International Conference on Intelligent Computing, Information and Control Systems
Practical Guidelines in Clinical Management
This second edition has been revised and updated to reflect key methodological

developments in health research. It is a comprehensive, easy to read, guide to the range of methods used to study and evaluate health and health services. It describes the concepts and methods used by the main disciplines involved in health research, including: demography, epidemiology, health economics, psychology and sociology.

A complete, up-to-date resource of information on more than 200 dyes and stains Handbook of Biological Dyes and Stains is the most comprehensive volume

available on the subject, covering all the available dyes and stains known to date in the literature for use in biology and medicine. Top dye expert Dr. Ram Sabnis organizes the compounds alphabetically by the most commonly used chemical name. He presents an easy-to-use reference complete with novel ideas for breakthrough research in medical, biological, chemical, and related fields. This is the first book to give the CAS registry number, chemical structure, Chemical Abstracts index name, all other chemical names, Merck Index

number, chemical/dye class, molecular formula, molecular weight, physical form, solubility, melting point, boiling point, pH range, color change at pH, pKa, absorption, and emission maxima of dyes and stains, as well as to provide access to synthesis procedures (lab scale and industrial scale) of dyes and stains. This user-friendly handbook also features references on safety, toxicity, and adverse effects of dyes and stains on humans, animals, and the environment, including: acute/chronic toxicity aquatic

toxicity carcinogenicity cytotoxicity ecotoxicity genotoxicity hepatotoxicity marine toxicity mutagenicity nephrotoxicity neurotoxicity oral toxicity phototoxicity phytotoxicity The use of biological dyes and stains has extremely high potential in today's business environment. This makes Handbook of Biological Dyes and Stains a convenient, must-have reference. Its staining, biological, and industrial applications make it a vital resource for industrial and academic researchers; the book also

serves as a valuable desktop reference for medical professionals, biologists, chemists, chemical/optical engineers, physicists, materials scientists, intellectual property professionals, students, and professors.

Thrombotic and bleeding disorders affect at least 10 million people in the US alone. As a result there has been much more interest and research into this field. The field of haematology is undergoing major advances in thrombosis research, including significant additions

to recommended treatment protocols and guidelines. This new handbook will cover all aspects of the practical mangement of commonly encountered thrombotic and bleeding disorders, with emphasis on clinical diagnosis, treatment and day-to-day management. It will distil the most clinically relevant material from the literature for all those working in the field of haemostasis and thrombosis.
This book presents selected, high-quality research papers from the International Conference on Electronic Systems and

Intelligent Computing (ESIC 2020), held at NIT Yupia, Arunachal Pradesh, India, on 2 – 4 March 2020. Discussing the latest challenges and solutions in the field of smart computing, cyber-physical systems and intelligent technologies, it includes papers based on original theoretical, practical and experimental simulations, developments, applications, measurements, and testing. The applications and solutions featured provide valuable reference material for future product development.

Metal Nanoparticles in Microbiology
Chemistry of Spices
Organic Pollutants
Nanosensor Technologies for Environmental Monitoring
Challenges and Applications
Capital Structure and Corporate Financing Decisions
Guide to Research Techniques in Neuroscience
The measurement of dependability attributes on real systems is a very

time-consuming and costly affair, making analytical or simulation modeling the only viable solutions. Dependability of Networked Computer-based Systems explores reliability, availability and safety modeling of networked computer-based systems used in life-critical applications such as avionics, nuclear power plants, automobiles and chemical process industries. Dependability of Networked Computer-based Systems gives an

overview of basic dependability modeling concepts and addresses new challenges in dependability modeling of networked computer-based systems, as well as new trends, their capabilities and limitations. It covers a variety of dependability modeling methods: stochastic processes, Markov and semi-Markov models, response-time distribution, stochastic Petri-net-based modeling formalisms, and Monte Carlo simulation models. Dependability

of Networked Computer-based Systems provides students and researchers with a detailed overview of dependability models and analysis techniques. Practicing engineers will also find this text a useful guide to decision-making based on system dependability at the design, operation and maintenance stages.

This book covers the most recent advances in using nanoparticles for biomedical imaging, including magnetic

resonance imaging (MRI), magnetic particle imaging (MPI), nuclear medicine, ultrasound (US) imaging, computed tomography (CT), and optical imaging. Topics include nanoparticles for MRI and MPI, siRNA delivery, theranostic nanoparticles for PET imaging of drug delivery, US nanoparticles for imaging drug delivery, inorganic nanoparticles for targeted CT imaging, and quantum dots for optical imaging. This book serves

as a valuable resource for the fundamental science of diagnostic nanoparticles and their interactions with biological targets, providing a practical handbook for improved detection of disease and its clinical implementation.

Covering the full range of rehabilitation research with a clear, easy-to-understand approach, this resource will help you analyze and apply research to practice.

Rehabilitation Research: Principles and Applications examines traditional experimental designs as well as nonexperimental and emerging approaches, including qualitative research, single-system design, outcomes research, and survey research. Clinical case studies and references will enhance your skills as a scientist-practitioner. Written by noted educators Russell Carter and Jay Lubinsky, this book emphasizes evidence-

based practice within physical therapy, occupational therapy, and other rehabilitation professions. Discipline-specific examples are drawn from three major fields: physical therapy, occupational therapy, and speech-language pathology. Unique! Coverage of non-experimental research includes chapters on clinical case reports and qualitative research, so you can understand a wide range of research methods and when it is most appropriate

to use each type. Expanded Single-Subject Design chapter provides a more thorough explanation and examples of multiple baselines, alternating treatments, and interactions -- designs that can be use in everyday clinical practice. Finding Research Literature chapter includes step-by-step descriptions of literature searches within different rehab professions. Student resources on a companion Evolve website allow you to review important

concepts with exercises and discussion questions, research article analyses, and a downloadable spreadsheet. Unique! New Evidence-Based Practice chapter provides an overview of the important concepts of EBP and the WHO model of health and disease. Discussion questions on the companion Evolve website provide you with ideas for further study. Unique! Research article analyses on Evolve provide more in-depth analysis and demonstrate the

writing style you should employ. New authors Russell Carter and Jay Lubinsky bring an interdisciplinary focus and a stronger emphasis on evidence-based practice.

A comprehensive guide to making better capital structure and corporate financing decisions in today's dynamic business environment Given the dramatic changes that have recently occurred in the economy, the topic of capital structure and corporate financing

decisions is critically important. The fact is that firms need to constantly revisit their portfolio of debt, equity, and hybrid securities to finance assets, operations, and future growth. Capital Structure and Corporate Financing Decisions provides an in-depth examination of critical capital structure topics, including discussions of basic capital structure components, key theories and practices, and practical application in an

increasingly complex corporate world. Throughout, the book emphasizes how a sound capital structure simultaneously minimizes the firm's cost of capital and maximizes the value to shareholders. Offers a strategic focus that allows you to understand how financing decisions relates to a firm's overall corporate policy Consists of contributed chapters from both academics and experienced professionals, offering a variety of

perspectives and a rich interplay of ideas Contains information from survey research describing actual financial practices of firms This valuable resource takes a practical approach to capital structure by discussing why various theories make sense and how firms use them to solve problems and create wealth. In the wake of the recent financial crisis, the insights found here are essential to excelling in today's volatile business

environment.
Cyber Intelligence and Information Retrieval
Graphene Functionalization Strategies
Advanced Machine Learning Approaches in Cancer Prognosis
Nanotechnology and Plant Sciences
The Design of Sustainable Product-Service Systems Applied to Distributed Economies
First International Conference, SmartTech-IC 2019, Quito, Ecuador,

December 2-4, 2019, Proceedings
Theory, Evidence, and Practice
This volume provides readers with a systematic assessment of current literature on the link between nutrition and immunity. Chapters cover immunonutrition topics such as child development, cancer, aging, allergic asthma, food intolerance, obesity, and chronic critical illness. It also presents a thorough review of microflora of the gut and the essential role it plays in

regulating the balance between immune tolerance and inflammation. Written by experts in the field, Nutrition and Immunity helps readers to further understand the importance of healthy dietary patterns in relation to providing immunity against disorders and offering readily available immunonutritional programming in clinical care. It will be a valuable resource for dietitians, immunologists, endocrinologists and other healthcare professionals.

Substantial Relations examines global

reproductive medicine in India, focusing on in vitro fertilization. Since the 1970s, India has played a central but changable role in shaping global reproductive medicine: from a provider of raw material, to a producer of knowledge and technology, to a thriving medical market that attracts patients from all over the world. Substantial Relations traces this transnational historical trajectory from the archive to oral history. Drawing on ethnographic research in homes, hospitals, and laboratories,

Sandra Bärnreuther provides deep insights into the intricacies of clinical life and everyday experience by depicting IVF users' quest for offspring and their fears of establishing unwanted ties, as well as the minute engagements of clinicians and laboratory staff with reproductive substances. Thinking through substances—metaphorically and materially—Sandra Bärnreuther provides a novel and rich analysis of the various relations that the burgeoning IVF sector in India has relied on and generated.

Substantial Relations contributes to a broader understanding of reproductive medicine as a global phenomenon constantly in the making, situating India in the midst of, rather than peripheral to, this process.

This book represents the first comprehensive compilation of deliberations on botany; genetic resources; genetic diversity analysis; classical genetics & traditional breeding; in vitro culture & genetic transformation; detailed information on molecular maps & mapping of

economic genes and QTLs; whole genome sequencing of the nuclear genome and sequencing of chloroplast genome; and elucidation of functional genomics. It also addresses alternate flowering, a unique problem in mango, and discusses currently available genomic resources and databases. Gathering contributions by globally reputed experts, the book will benefit the students, teachers, and scientists in academia and at private companies interested in horticulture, genetics, breeding, pathology, entomology,

physiology, molecular genetics and breeding, in vitro culture & genetic engineering, and structural and functional genomics.

Modern neuroscience research is inherently multidisciplinary, with a wide variety of cutting edge new techniques to explore multiple levels of investigation. This Third Edition of Guide to Research Techniques in Neuroscience provides a comprehensive overview of classical and cutting edge methods including their utility, limitations, and how data are

presented in the literature. This book can be used as an introduction to neuroscience techniques for anyone new to the field or as a reference for any neuroscientist while reading papers or attending talks. • Nearly 200 updated full-color illustrations to clearly convey the theory and practice of neuroscience methods • Expands on techniques from previous editions and covers many new techniques including in vivo calcium imaging, fiber photometry, RNA-Seq, brain spheroids, CRISPR-Cas9 genome editing, and more •

Clear, straightforward explanations of each technique for anyone new to the field • A broad scope of methods, from noninvasive brain imaging in human subjects, to electrophysiology in animal models, to recombinant DNA technology in test tubes, to transfection of neurons in cell culture • Detailed recommendations on where to find protocols and other resources for specific techniques • “Walk-through boxes that guide readers through experiments step-by-step

Design and Applications of Nanoparticles

in Biomedical Imaging
Designing Sustainability for All
Handbook of Banana Production, Postharvest Science, Processing Technology, and Nutrition
Thinking Beyond
Handbook of Biological Dyes and Stains
The Mango Genome
An Introduction
This book (24 chapters) covers the chemistry (chemical composition and structure) of the following spice

plants and their products, and provides brief information on the morphology, and postharvest management (storage, packaging and grading) of these crops: black pepper (Piper nigrum), small cardamom (Elettaria cardamomum), large cardamom (Amomum subulatum), ginger, turmeric, cinnamon and cassia (Cinnamomum spp.), clove, nutmeg and mace, coriander (Coriandrum sativum), cumin (Cuminum cyminum), fennel, fenugreek, paprika and chilli (Capsicum

spp.), vanilla (Vanilla spp.), ajowan (Trachyspermum ammi), star anise (Illicium verum), aniseed (Pimpinella anisum), garcinia (Garcinia spp.), tamarind, parsley, celery, curry leaf (Murraya koenigii) and bay leaf (Laurus nobilis). This book will be useful to researchers, industrialists and postgraduate students of agriculture, horticulture and phytochemistry, and to spice traders and processors.

This open access book introduces design

for Sustainable Product-Service Systems (S.PSS) and for Sustainable Distributed Economies (S.DE). These are introduced as technical and operative tools for the development of a new generation of designers, responsible and capable of designing environmentally, socially and economically sustainable solutions, accessible to all. The book provides a comprehensive framework and also practical tools to support the system design for sustainability process. It

overviews methodologies, tools and strategies for Sustainable PSS design applied to Distributed Economies (DE) and provides strategies and design guidelines. All of these are highlighted and expanded upon with international case studies.

This book is a collection of papers presented at the International Conference on Intelligent Computing, Information and Control Systems (ICICCS 2020). It encompasses various research

works that help to develop and advance the next-generation intelligent computing and control systems. The book integrates the computational intelligence and intelligent control systems to provide a powerful methodology for a wide range of data analytics issues in industries and societal applications. The book also presents the new algorithms and methodologies for promoting advances in common intelligent computing and

control methodologies including evolutionary computation, artificial life, virtual infrastructures, fuzzy logic, artificial immune systems, neural networks and various neuro-hybrid methodologies. This book is pragmatic for researchers, academicians and students dealing with mathematically intransigent problems. Therapeutic enzymes exhibit fascinating features and opportunities, and represent a significant and promising

subcategory of modern biopharmaceuticals for the treatment of several severe diseases. Research and drug developments efforts and the advancements in biotechnology over the past twenty years have greatly assisted the introduction of efficient and safe enzyme-based therapies for a range of both rare and common disorders. The introduction and regulatory approval of twenty different recombinant enzymes has enabled effective enzyme-

replacement therapy. This volume aims to overview these therapeutic enzymes, focusing in particular on more recently approved enzymes produced by recombinant DNA technology. This volume is composed of four sections. Section 1 provides an overview of the production process and biochemical characterization of therapeutic enzymes, while Section 2 focuses upon the engineering strategies and delivery methods of therapeutic enzymes. Section

3 highlights the clinical applications of approved therapeutic enzymes, including aspects on their structure, indications and mechanisms of action. Together with information on these mechanisms, safety and immunogenicity issues and various adverse events of the recombinant enzymes used for therapy are discussed. Section 4, provides discussion on the prospective and future developments of new therapeutic enzymes. This book is aimed

at academics, researchers and students undertaking advanced undergraduate/postgraduate programs in the biopharmaceutical/biotechnology area who wish to gain a comprehensive understanding of enzyme-based therapeutic molecules.

Synthesis and Industrial Applications

From Synthesis to Applications

Dependability of Networked Computer-based Systems

Research Methods in Health

Investigating Health and Health Services

A smart camera is an integrated machine vision system which, in addition to image capture circuitry, includes a processor, which can extract information from images without need for an external processing unit, and interface devices used to make results available to other devices. This book provides content on smart cameras for an interdisciplinary audience of

professionals and students in embedded systems, image processing, and camera technology. It serves as a self-contained, single-source reference for material otherwise found only in sources such as conference proceedings, journal articles, or product data sheets. Coverage includes the 50 year chronology of smart cameras, their technical evolution, the state-of-the art, and numerous applications, such as surveillance and monitoring, robotics,

and transportation.
Immunometabolism has emerged as an intersectional crossroad between metabolism and immune response. Over the past decade, it has become clear that most - if not all - immune cell functions are not separated from cellular metabolism. Although seminal works have addressed the metabolic fate of immune cells during differentiation and function, the physiological status of a given tissue is also dependent on

the cell metabolism. The dialogue between immune cells and their microenvironment can also modulate cellular metabolism, which can trigger the onset and progression of a multitude of inflammation-mediated diseases. Thus, uncovering the specific characteristics of the metabolism in different immune cells types and in different conditions, can shed light into the molecular mechanisms of disease and help develop new drugs and

therapeutic strategies to treat immune diseases. The edited volume Essentials aspects of Immunometabolism will give the readers a broad view on how metabolic pathways can influence many types of immune cells during activation, differentiation and function, in health and disease. Of note, the structure of the book was created thinking not only on the experienced immunologist but also on undergraduate and graduate students,

physicians, and all members of the scientific community interested in this exciting field of research.