Technical Data 1 K 1nkp G Dabpumpsbg

A Theranostic and Precision Medicine Approach for Female-Specific Cancers provides information regarding ongoing research and clinical data surrounding female specific cancers (breast, cervical, ovarian and endometrial cancers). The book encompasses detailed descriptions about diagnostics and therapeutic options for easy understanding, focusing on the subject matter with a broader range of treatment options. In addition, it explores new theranostics, i.e., diagnostic, therapeutic and precision medicine strategies currently being developed for FSCs. This book is a valuable resource for cancer researchers, clinicians, graduate students and other members of biomedical field who need to understand the most recent and promising approaches to manage FSCs. Explores new diagnostic biomarkers surrounding the early detection and prognosis of FSCs Examines new genetic and molecularly targeted approaches for the treatment of these aggressive diseases Discusses new theranostic approaches that combine diagnosis and treatment through the use of nanotechnology in FSCs Addresses how these various advances can be integrated into a precision and personalized medicine approach that can eventually enhance patient care

The book covers the latest research in the areas of mathematics that deal the properties of partial differential equations and stochastic processes on spaces in connection with the geometry of the underlying space. Written by experts in the field, this book is a valuable tool for the advanced mathematician.

This text provides the beginning graduate student with an account of p-summing and related operators.

Large-Scale Machine Learning in the Earth Sciences

Principles and Applications

Zentralblatt für Mineralogie

Small-Molecule Inhibitors of Protein-Protein Interactions

Methods, Techniques, and Practices

Methods and Protocols

This second edition provides new and updated chapters detailing recent advances in MYC research and current techniques. Chapters guide readers through protocols on how to express and purify MYC protein, X-ray crystallography, NMR, techniques to study how MYC is modified, apoptosis, senescence, proliferation, metabolic changes, translation, tumorigenesis,reprogramming, and clinical application of MYC studies.Written in the highly successful Methods in Molecular Biology series format, chapters include introductions to their respective topics, lists of the necessary materials and reagents, step-by-step, readily reproducible laboratory protocols, and tips on troubleshooting and avoiding known pitfalls. Authoritative and cutting-edge, The Myc Gene: Methods and Protocols, Second Edition aims to ensure successful results in the further study of this vital field.

Textile industry in India is the second largest employment generator after agriculture. It holds significant status in India as it provides one of the fundamental necessities of the people. Textile processing is one of the important industries related with textile manufacturing operations. It is a general term that covers right from singeing to finishing & printing of fabric apart from giving huge value-addition at every stage of processing. A number of new innovations have led to the industrialization of the textile industry. The silk reeling techniques are excellent methods to produce superior grade raw silk which is used by the textile industry to produce exotic fabric. Silk reeling is the final and purely commercial phase of sericulture. It is concerned with unwinding of the silk filaments of the cocoon. The sericulture industry is agro based and flourishing mostly in rural areas. More than 50 per cent of silk is reeled by a villager using country charka which forms the cottage industry. Silk provides much needed work in several developing and labour rich countries. The textile industry is primarily concerned with the production of yarn, and cloth and the subsequent design or manufacture of clothing and their distribution. The raw material may be natural or synthetic using products of the chemical industry. Some of the fundamentals of the book are chemical modification of textile celluloses, fabric varieties, silk as a textile fibre, silk reeling technology, silk re-reeling technology, fluidized beds to textile processing, high alpha cellulose pulp for viscose rayon, reaction of cellulose with cross linking agents, textiles adhesives, flame retardants for textiles, halogenated flame retardants, antinomy and other organic compounds, surfactants, chemical used in textiles, etc. This book contains fabric varieties, silk reeling technology, cellulose ethers, and crease resistance of cellulose textiles, tone and shade control in textile, textiles adhesives, flame retardants for textiles, chemical used in textiles. This book will be resourceful to upcoming entrepreneur, Seri culturist, existing industries, technical institutions etc.

Retrovirus-Cell Interactions provides an up-to-date review of the interactions between retroviruses and the cells they infect, offering a comprehensive understanding of how retroviruses hijack cellular factors to facilitate virus replication. Drugs targeting viral enzymes have been developed to treat HIV; the next challenge is to inhibit virus-cell interactions as next generation treatment strategies. Organized according to the retrovirus' replication cycle, this book does not focus exclusively on HIV, but rather includes important findings in other retroviral systems, including animal retroviruses, retrotransposons, and endogenous retroelements to allow broad comparisons on important commonalities and differences. Provides a valuable starting point for people who want to develop a detailed understanding of retroviral replication Includes future-thinking strategies, such as next-generation treatment and anti-retroviral therapeutics Features important commonalities and differences among retroviral systems

Chromatin and Epigenetics

Epigenetics of Cancer Prevention

Gene Regulation in Eukaryotes

Exploring Protein Structure: Principles and Practice

The Myc Gene

Avian Immunology

For many centuries Indian and Tibetan Buddhists have employed this collection of pithy, penetrating Dharma slogans to develop compassion, equanimity, lovingkindness, and joy for others. Known as the lojong—or mind-training—teachings, these slogans have been the subject of deep study, contemplation, and commentary by many great masters. In this volume, Traleg Kyabgon offers a fresh translation of the slogans as well as in-depth living among and teaching Westerners for over twenty years, his approach is uniquely insightful into the ways that the slogans could be misunderstood or misinterpreted within our culture. Here, he presents a refreshing and clarifying view, which seeks to correct points of confusion.

Computational Methods to Study the Structure and Dynamics of Biomolecules and Biomolecular ProcessesFrom Bioinformatics to Molecular Quantum MechanicsSpringer

Scientists often look askance at their colleagues whose research appears too strongly focused on a single gene or gene product. We are supposed to be interested in the “big picture” and excessive zeal in pursuit of a single pixel might seem to border on an obsession that is likely to yield only details. However as this volume of Current Topics in Microbiology and Immunology demonstrates, this is certainly not the case for myc. Intense study over the last twenty years has only broadened our view of its functions and led to insights into mechanisms relating to transcriptional regulation as well as to cell growth, proliferation, differentiation, apoptosis and organismal development. The myc gene originally came to light as a retroviral oncogene (v-myc) associated with a wide range of acute neoplasms. It was later shown to be a virally transduced cellular gene (c-myc) which is a memb myc,N-myc,L-myc). These family members are themselves subject to a bewildering assortment of genetic rearrangements associated with many different types of tumors derived from many different types of cells. These rearrangements (including chromosomal translocation, viral integration, and gene ampli?cation) act to uncouple expression of the myc family genes from their normal physiological regulators. The chapter by LIU and LEVEN leading to regulation of myc expression, showing that such regulation occurs at several different levels and through multiple mechanisms.

Fuzziness

From Bioinformatics to Molecular Quantum Mechanics

Fitting Models to Biological Data Using Linear and Nonlinear Regression

The Practice of Lojong

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Mathématiques MPSI-PCSI

An Introduction to Ethical, Safety and Intellectual Property Rights Issues in Biotechnology provides a comprehensive look at the biggest technologies that have revolutionized biology since the early 20th century, also discussing their impact on society. The book focuses on issues related to bioethics, biosafety and intellectual property rights, and is written in an easy-to-understand manner for graduate students and early career researchers interested in the opportunities and challenges associated with advances in biotechnology. Important topics covered include the Human Genome Project, human cloning, rDNA technology, the 3Rs and animal welfare, bioterrorism, human rights and genetic discrimination, good laboratory practices, good manufacturing practices, the protection of biological material and much more. Full of relevant case studies, practical examples, weblinks and resources for further reading, this book offers an essential and holistic look at the ways in which biotechnology has affected our global society. Provides a comprehensive look at the ethical, legal and social implications of biotechnology Discusses the global efforts made to resolve issues Incorporates numerous case studies to more clearly convey concepts and chart the development of guidelines and legislation regulating issues in biotechnology Takes a straightforward approach to highlight and discuss both the benefits and risks associated with the latest biotechnologies

Most biologists use nonlinear regression more than any other statistical technique, but there are very few places to learn about curve-fitting. This book, by the author of the very successful Intuitive Biostatistics, addresses this relatively focused need of an extraordinarily broad range of scientists.

Ce manuel de mathématiques est destiné aux étudiants de première année de Classes Préparatoires aux Grandes Ecoles scientifiques (ou CPGE scientifiques) des filières MPSI (Mathématiques, Physique, Sciences de l'ingénieur) et PCSI (Physique, Chimie, Sciences de l'ingénieur). Cette édition est entièrement conforme au nouveau programme qui entre en vigueur à la rentrée 2013. Elle est parfaitement adaptée au niveau des élèves et à leurs besoins: le livre est clair, progressif, comporte de nombreux rappels ; le cours est limité aux notions essentielles. Trois exercices spécifiques pour se préparer à l'interrogation orale (colles) sont proposés à la fin de chaque chapitre. De difficulté croissante, ils sont conçus pour être traités en 1 heure chacun (la durée d'une interrogation orale) et sont corrigés en fin d'ouvrage. Des tests et des exercices complètent l'ouvrage pour une préparation optimale.Quelques notions d'histoire des mathématiques sont aussi présentées pour illustrer l'ensemble des idées. Le site compagnon proposera aussi de nombreux exemples de calcul forme en Scilab.

Statistical Mechanics

Immunomodulatory Roles of Tryptophan Metabolites in Inflammation and Cancer

Analysis and Partial Differential Equations on Manifolds, Fractals and Graphs

Novel Therapeutic Approaches for the Treatment of Ocular Disease, Volume I

Macromolecular Crystallography, Part A.

Research Paper

First Published in 2017. Routledge is an imprint of Taylor & Francis, an Informa company.

The second edition of Avian Immunology provides an up-to-date overview of the current knowledge of avian immunology. From the ontogeny of the avian immune system to practical application in vaccinology, the book encompasses all aspects of innate and adaptive immunity in chickens. In addition, chapters are devoted to the immunology of other commercially important species such as turkeys and ducks, and to ecoimmunology summarizing the knowledge of immune responses in free-living birds often in relation to reproductive success. The book contains a detailed description of the avian innate immune system, encompassing the mucosal, enteric, respiratory and reproductive systems. The diseases and disorders it covers include immunodepressive diseases and immune evasion, autoimmune diseases, and tumors of the immune system. Practical aspects of vaccination are examined as well. Extensive appendices summarize resources for scientists including cell lines, inbred chicken lines, cytokines, chemokines, and monoclonal antibodies. The world-wide importance of poultry protein for the human diet, as well as the threat of avian influenza pandemics like H5N1 and heavy reliance on vaccination to protect commercial flocks makes this book a vital resource. This book provides crucial information not only for poultry health professionals and avian biologists, but also for comparative and veterinary immunologists, graduate students and veterinary students with an interest in avian immunology. With contributions from 33 of the foremost international experts in the field, this book provides the most up-to-date review of avian immunology so far Contains a detailed description of the avian innate immune system reviewing constitutive barriers, chemical and cellular responses; it includes a comprehensive review of avian Toll-like receptors Contains a wide-ranging review of the "ecoimmunology" of free-living avian species, as applied to studies of population dynamics, and reviews methods and resources available for carrying out such research

In this volume, the editors have collected the knowledgeable insights of a number of leaders in this field - researchers who have achieved success in addressing the difficult problem of inhibiting protein-protein interactions. These researchers describe their unique approaches, and share experiences, results, thoughts, and opinions. The content of the articles is rich, and in terms of scope ranges from generalized approaches to specific case studies. There are various focal points, including methodologies and the molecules themselves. Ultimately, there are numerous lessons to be taken away from this collection, and the editors hope that this snapshot of the current state of the art in developing protein-protein inhibitors not only pays tribute to the past successes, but also generates excitement about the future potential of this field

A Generalization of Bohr-Mollerup's Theorem for Higher Order Convex Functions

Point Processes and Their Statistical Inference

Journal of Nepal Geological Society

Structural Disorder in Protein Complexes

Mechatronics

A Theranostic and Precision Medicine Approach for Female-Specific Cancers

This eBook is a collection of articles from a Frontiers Research Topic. Frontiers Research Topics are very popular trademarks of the Frontiers Journals Series: they are collections of at least ten articles, all centered on a particular subject. With their unique mix of varied contributions from Original Research to Review Articles, Frontiers Research Topics unify the most influential researchers, the latest key findings and historical advances in a hot research area! Find out more on how to host your own Frontiers Research Topic or contribute to one as an author by contacting the Frontiers Editorial Office: frontiersin.org/about/contact.

At the code level, discrete-time chaotic systems can be used to generate spreading codes for DS-SS systems. At the signal level, continuous-time chaotic systems can be used to generate wideband carriers for digital modulation schemes. The potential of chaos engineering is now recognized worldwide, with research groups actively pursuing the exploitation of chaotic phenomena in cryptography, spread spectrum communications, electromagnetic interference reduction, and many other applications. Although some noteworthy results have already been achieved, until now, the field has lacked both a systematic treatment of these developments and a careful, quantitative comparison of chaos-based and conventional techniques. Chaotic Electronics in Telecommunications fills both of those needs. It addresses the use of chaos in digital communications applications, from the coding level to circuit design. Each chapter offers a formal exposition of the theoretical and engineering tools needed to apply chaos, followed by discussion of the algorithms and circuits needed to apply the theory to real-world communications systems.

Mechatronics is a core subject for engineers, combining elements of mechanical and electronic engineering into the development of computer-controlled mechanical devices such as DVD players or anti-lock braking systems. This book is the most comprehensive text available for both mechanical and electrical engineering students and will enable them to engage fully with all stages of mechatronic system design. It offers broader and more integrated coverage than other books in the field with practical examples, case studies and exercises throughout and an Instructor's Manual. A further key feature of the book is its integrated coverage of programming the PIC microcontroller, and the use of MATLAB and Simulink programming and modelling, along with code files for downloading from the accompanying website. * Integrated coverage of PIC microcontroller programming, MATLAB and Simulink modelling * Fully developed student exercises, detailed practical examples * Accompanying website with Instructor's Manual, downloadable code and image bank

Uveal Tumors

Biothermodynamics

Targeting Protein-Protein Interactions by Small Molecules

Die Bilanz der Moderne

Fundamentals and Model Solutions

This book provides a comprehensive overview of modern computer-based techniques for analyzing the structure, properties and dynamics of biomolecules and biomolecular processes. It is organized in four main parts; the first one deals with methodology of molecular simulations; the second one with applications of molecular simulations; the third one introduces bioinformatics methods and the use of experimental information in molecular simulations; the last part reports on selected applications of molecular quantum mechanics. This second edition has been thoroughly revised and updated to include the latest progresses made in the respective field of research.

This book comprehensively reviews the state-of-the-art strategies developed for protein-protein interaction (PPI) inhibitors, and highlights the success stories in new drug discovery and development. Consisting of two parts with twelve chapters, it demonstrates the design strategies and case studies of small molecule PPI inhibitors. The first part discusses various discovery strategies for small molecule PPI inhibitors, such as high throughput screening, hot spot-based design, computational approaches, and fragment-based design. The second part presents recent advances in small molecule inhibitors, focusing on clinical candidates and new PPI targets. This book has broad appeal and is of significant interest to the pharmaceutical science and medicinal chemistry communities.

Epigenetics of Cancer Prevention, Volume Ten is the first to look at epigenetics and chemoprevention together. Although there is numerous scientific data available on how epigenetics can lead to cancer and how chemoprevention can be beneficial in the treatment of, or improvement of quality of life, together they will set an advanced understanding for the reader in this upcoming field of chemoprevention influencing epigenetics. This book discusses molecular epigenetic targets of natural products, such as green tea polyphenols, curcumin and resveratrol, and organ specific epigenetic targets related to diverse types of cancer, for example prostate, colorectal, breast, lung and skin cancers. Additionally, it encompasses a discussion on research methods and limitations to study epigenetics and epigenomics of chemopreventive drugs and personalized cancer treatment with phytochemicals. The book is ideal for cancer researchers, health care professionals and all individuals who are interested in cancer prevention research and its clinical applications, especially in natural remedies. Lists natural agents, including nutraceuticals, and their effects on normal or tumor genome Addresses various epigenetic systems and mechanisms in the regulation and support of the mammalian genome Discusses how various parts of dietary phytochemicals can influence or modify epigenetic mechanisms in several types of cancer

An Introduction to Ethical, Safety and Intellectual Property Rights Issues in Biotechnology

Spontaneamente. Esercizi risolti di chimica fisica

Clinical Ophthalmic Oncology

Southeastern Geology

The Complete Book on Textile Processing and Silk Reeling Technology

Computational Methods to Study the Structure and Dynamics of Biomolecules and Biomolecular Processes

In the last several years there has been an explosion in the ability of biologists, molecular biologists and biochemists to collect vast amounts of data on their systems. This volume presents sophisticated methods for estimating the thermodynamic parameters of specific protein-protein, protein-DNA and small molecule interactions.

This textbook introduces the basics of protein structure and logically explains how to use online software to explore the information in protein structure databases. Readers will find easily understandable, step-by step exercises and video-trainings to support them in grasping the fundamental concepts. After reading this book, readers will have the skills required to independently explore and analyze macromolecular structures, will be versed in extracting information from protein databases and will be able to visualize protein structures using specialized software and on-line algorithms. This book is written for advanced undergraduates and PhD students wishing to use information from structural biology in their assignments and research and will be a valuable source of information for all those interested in applied and theoretical aspects of structural biology.

With the most comprehensive and up-to-date overview of structure-based drug discovery covering both experimental and computational approaches, Structural Biology in Drug Discovery: Methods, Techniques, and Practices describes principles, methods, applications, and emerging paradigms of structural biology as a tool for more efficient drug development. Coverage includes successful examples, academic and industry insights, novel concepts, and advances in a rapidly evolving field. The combined chapters, by authors writing from the frontlines of structural biology and drug discovery, give readers a valuable reference and resource that: Presents the benefits, limitations, and potentiality of major techniques in the field such as X-ray crystallography, NMR, neutron crystallography, cryo-EM, mass spectrometry and other biophysical techniques, and computational structural biology Includes detailed chapters on druggability, allostery, complementary use of thermodynamic and kinetic information, and powerful approaches such as structural chemogenomics and fragment-based drug design Emphasizes the need for the in-depth biophysical characterization of protein targets as well as of therapeutic proteins, and for a thorough quality assessment of experimental structures Illustrates advances in the field of established therapeutic targets like kinases, serine proteinases, GPCRs, and epigenetic proteins, and of more challenging ones like protein-protein interactions and intrinsically disordered proteins

The Myc/Max/Mad Transcription Factor Network

Cultivating Compassion through Training the Mind

Absolutely Summing Operators

Retrovirus-Cell Interactions

Structural Biology in Drug Discovery

Programme 2013 avec algorithmique en Scilab

Detailed characterization of fuzzy interactions will be of central importance for understanding the diverse biological functions of intrinsically disordered proteins in complex eukaryotic signaling networks. In this volume, Peter Tompa and Monika Fuxreiter have assembled a series of papers that address the issue of fuzziness in molecular interactions. These papers provide a broad overview of the phenomenon of fuzziness and provide compelling examples of the central role played by fuzzy interactions in regulation of cellular signaling processes and in viral infectivity. These contributions summarize the current state of knowledge in this new field and will undoubtedly stimulate future research that will further advance our understanding of fuzziness and its role in biomolecular interactions.

Statistical Mechanics: Fundamentals and Model Solutions, Second Edition Fully updated throughout and with new chapters on the Mayer expansion for classical gases and on cluster expansion for lattice models, this new edition of Statistical Mechanics: Fundamentals and Model Solutions provides a comprehensive introduction to equilibrium statistical mechanics for advanced undergraduate and graduate students of mathematics and physics. The author presents a fresh approach to the subject, setting out the basic assumptions clearly and emphasizing the importance of the thermodynamic limit and the role of convexity. With problems and solutions, the book clearly explains the role of models for physical systems, and discusses and solves various models. An understanding of these models is of increasing importance as they have proved to have applications in many areas of mathematics and physics. Features Updated throughout with new content from the field An established and well-loved textbook Contains new problems and solutions for further learning opportunity Author Professor Teunis C. Dorlas is at the Dublin Institute for Advanced Studies, Ireland.

From the Foreword: "While large-scale machine learning and data mining have greatly impacted a range of commercial applications, their use in the field of Earth sciences is still in the early stages. This book, edited by Ashok Srivastava, Ramakrishna Nemani, and Karsten Steinhaeuser, serves as an outstanding resource for anyone interested in the opportunities and challenges for the machine learning community in analyzing these data sets to answer questions of urgent societal interest...I hope that this book will inspire more computer scientists to focus on environmental applications, and Earth scientists to seek collaborations with researchers in machine learning and data mining to advance the frontiers in Earth sciences." --Vipin Kumar, University of Minnesota Large-Scale Machine Learning in the Earth Sciences provides researchers and practitioners with a broad overview of some of the key challenges in the intersection of Earth science, computer science, statistics, and related fields. It explores a wide range of topics and provides a compilation of recent research in the application of machine learning in the field of Earth Science. Making predictions based on observational data is a theme of the book, and the book includes chapters on the use of network science to understand and discover teleconnections in extreme climate and weather events, as well as using structured estimation in high dimensions. The use of ensemble machine learning models to combine predictions of global climate models using information from spatial and temporal patterns is also explored. The second part of the book features a discussion on statistical downscaling in climate with state-of-the-art scalable machine learning, as well as an overview of methods to understand and predict the proliferation of biological species due to changes in environmental conditions. The problem of using large-scale machine learning to study the formation of tornadoes is also explored in depth. The last part of the book covers the use of deep learning algorithms to classify images that have very high resolution, as well as the unmixing of spectral signals in remote sensing images of land cover. The authors also apply long-tail distributions to geoscience resources, in the final chapter of the book.

A Practical Guide to Curve Fitting

Matematicheskoe modelirovanie

Chaotic Electronics in Telecommunications

Written by internationally renowned experts, Clinical Ophthalmic Oncology provides practical guidance and advice on the diagnosis and management of the complete range of ocular cancers. The book supplies all of the state-of-the-art knowledge required in order to identify these cancers early and to treat them as effectively as possible. Using the information provided, readers will be able to provide effective patient care using the latest knowledge on all aspects of ophthalmic oncology, to verify diagnostic conclusions based on comparison with numerous full-color clinical photographs, and to locate required information quickly owing to the clinically focused and user-friendly format. This volume, devoted solely to uveal tumors, explains the various diagnostic and biopsy techniques that may be used and describes the therapeutic options of potential value for different types of tumor.

A much-needed guide through the overwhelming amount of literature in the field. Comprehensive and detailed, this book combines background information with the most recentinsights. It introduces current concepts, emphasizing the transcriptional control of genetic information. Moreover, it links data on the structure of regulatory proteins with basic cellular processes. Both advanced students and experts will find answers to such intriguing questions as: - How are programs of specific gene repertoires activated and controlled? - Which genes drive and control morphogenesis? - Which genes govern tissue-specific tasks? - How do hormones control gene expression in coordinating the activities of different tissues? An abundant number of clearly presented glossary terms facilitates understanding of the biological background. Speacial feature: over 2200 (!) literature references.

In 1922, Harald Bohr and Johannes Mollerup established a remarkable characterization of the Euler gamma function using its log-convexity property. A decade later, Emil Artin investigated this result and used it to derive the basic properties of the gamma function using elementary methods of the calculus. Bohr-Mollerup's theorem was then adopted by Nicolas Bourbaki as the starting point for his exposition of the gamma function. This open access book develops a far-reaching generalization of Bohr-Mollerup's theorem to higher order convex functions, along lines initiated by Wolfgang Krull, Roger Webster, and some others but going considerably further than past work. In particular, this generalization shows using elementary techniques that a very rich spectrum of functions satisfy analogues of several classical properties of the gamma function, including Bohr-Mollerup's theorem itself, Euler's reflection formula, Gauss' multiplication theorem, Stirling's formula, and Weierstrass' canonical factorization. The scope of the theory developed in this work is illustrated through various examples, ranging from the gamma function itself and its variants and generalizations (q-gamma, polygamma, multiple gamma functions) to important special functions such as the Hurwitz zeta function and the generalized Stieltjes constants. This volume is also an opportunity to honor the 100th anniversary of Bohr-Mollerup's theorem and to spark the interest of a large number of researchers in this beautiful theory.