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Collection of the monthly climatological reports of the United States by state or region, with monthly and annual national summaries.

This book gathers relatively recent and significant topics in the field of ion channel research. Ion channels form the molecular basis for membrane excitability in cells present in the cardiovascular and nervous systems. In many non-excitable cells, ion channels contribute to diverse physiological functions, including the secretion of signaling compounds like hormones and insulin, cell volume regulation, and diseases have been attributed to abnormal channel functions and defective membrane expression of channel proteins. On the other hand, ion channels are excellent models for studying protein biophysics, especially the allosteric regulation of protein function by miscellaneous stimuli. Therefore, research on ion channels carries significant meaning for the understanding of basic protein biophysics, developing novel and effective treatments for related human diseases. This book provides graduates and scientists in both basic and clinical levels a comprehensive understanding of cutting-edge advances and a useful and stimulating platform for tackling their own questions about ion channels.

New scientific discoveries in the Congo Basin as a result of international collaborations The Congo is the world's second largest river basin and home to 120 million people. Understanding the cycling of water, sediments, and nutrients is important as the region faces climatic and anthropogenic change. Congo Basin Hydrology, Climate, and Biogeochemistry: A Foundation for the Future explores water sediment and carbon dynamics. It features contributions from experts in the region and their international collaborators. Volume highlights include: New in-situ and remotely sensed measurements and model results Use of historic data to assess precipitation and hydrologic changes Exploration of water exchange between wetlands and rivers Biogeochemical processes in the Congo's forests and river

Studies from different parts of the Congo river and its adjoining basins This book is available in English and French. The American Geophysical Union promotes discovery in Earth and space science for the benefit of humanity. Its publications disseminate scientific knowledge and provide resources for researchers, students, and professionals.

Volume 1
Climatological Data, North Dakota

Diversity, Ecology and Drug Discovery
El Niño Southern Oscillation in a Changing Climate
Comprehensive Remote Sensing

Reactions, Mechanisms, and Structure

Business intelligence initiatives have been dominating the technology priority list of many organizations. However, the lack of effective information quality and governance strategies and policies has been meeting these initiatives with some challenges. *Information Quality and Governance for Business Intelligence* presents the latest exchange of academic research on all aspects of practicing and managing information using a multidisciplinary approach that examines its quality for organizational growth. This book is an essential reference tool for researchers, practitioners, and university students specializing in business intelligence, information quality, and information systems.

Biotechnology and Bioengineering presents the most up-to-date research on biobased technologies. It is designed to help scientists and researchers deepen their knowledge in this critical knowledge field. This solid resource brings together multidisciplinary research, development, and innovation for a wide study of Biotechnology and Bioengineering. Global economic losses due to severe weather events have grown dramatically over the past two decades. A large proportion of these losses are due to severe wind storms such as tropical cyclones and tornadoes, which can cause destruction to buildings, houses, and other infrastructure over large areas. To address the growing losses, many new large-scale and full-scale laboratories have been developed. These tools are used to examine the issues that could not be solved with the traditional tools of wind engineering including model-scale boundary layer wind tunnels, simplified standardized product tests, and other methods of analysis. This book presents state-of-the-art results from the development of the many novel approaches being used to mitigate natural disasters around the world.

Clinical Perspectives on an Emerging Specialty

The Nature of Communication

Local Climatological Data

International Scientific Siberian Transport Forum TransSiberia - 2021

Biotechnology and Bioengineering

Federal Register

Psychology provides clinical, evidence-based training in palliative and end of life care for clinical psychologists to accomplish specific therapeutic goals. Chapters provide a clear road map for approaching assessment and treatment by reviewing the use of psychotropic medications for patients with advanced and terminal illness, basic but important aspects of pain medication, in depth psychological and psychiatric assessment for patients with advanced illness and their caregivers, and assessment tools, highlighting the specific clinical contexts for their use. The volume also includes evidence-based psychotherapy models that have been shown effective in treating various manifestations of psychological distress in patients and caregivers. In addition to clinical topics, Palliative Psychology addresses crucial and often sensitive professional issues, including communication and collaboration with medical providers and issues of stress and burnout. Psychologists will learn how to best communicate the results of their assessments and treatment plan goals to other care providers in order to foster collaboration and better position themselves as advocates for their patients. Insight-oriented and practical suggestions will help clinicians manage the emotional intensity of this work and channel the therapeutic potential of their emotional reactions into their work with patients and caregivers.

The kidneys are a vital organ present in humans and vertebrate animals. Various toxic chemicals, present in food and water adversely affect the kidneys. Plants and plant-derived compounds have been a major source for the treatment and cure of diseases since ancient times. Even today, almost 25% of the prescription drugs for renal problems are sourced from plants. An Introduction to Nephroprotective Plants gives an overview of nephrotoxicity and medicinal plants used for protecting the kidney and reducing the effect of kidney toxicity and managing renal diseases. This book is an answer to the current gaps in knowledge resources on nephroprotective plants. The reader is introduced to the basic physiology of the renal excretory system and its disorders. The introduction is followed by chapters which give information on medicinal plants used in traditional systems of medicine (both codified and noncodified).

Information about plant parts used, method of use and dosage is provided along with references. Key Features- Simple structured presentation in six chapters- Includes an introduction to the urinary system and its diseases- Includes information about codified and noncodified medicinal plants used for neuroprotection- Covers phytochemicals extracted from medicinal plants which are screened and used in modern medicine for neuroprotection in detail- Covers ethnobotanical and polyherbal formulations- References for further reading An Introduction to Nephroprotective Plants serves as a convenient desk reference for all researchers (pharmacologists, medicinal chemists, ethnobotanists) and healthcare professionals (physicians, pharmacists, nurses and medical students) who require complete information on nephroprotective plants. Audience: Researchers (pharmacologists, medicinal chemists, ethnobotanists) and healthcare professionals (physicians, pharmacists, nurses and medical students) who require complete information on nephroprotective plants, readers in traditional medicine.

Perhaps just as perplexing as the biggest issues at the core of Earth science is the nature of communicating about nature itself. New Trends in Earth-Science Outreach and Engagement: The Nature of Communication examines the processes of communication necessary in bridging the chasm between climate change and natural hazard knowledge and public opinion and policy. At this junction of science and society, 17 chapters take a proactive and prescriptive approach to communicating with the public, the media, and policy makers about the importance of Earth science in everyday life. Book chapters come from some 40 authors who are geophysical scientists, social scientists, educators, scholars, and professionals in the field. Bringing diverse perspectives, these authors hail from universities, and research institutes, government agencies, non-profit associations, and corporations. They represent multiple disciplines, including geosciences, education, climate science education, environmental communication, and public policy. They come from across the United States and around the world. Arranged into five sections, the book looks at geosciences communication in terms of: 1) Education 2) Risk management 3) Public discourse 4) Engaging the public 5) New media From case studies and best practices to field work and innovations, experts deliver pragmatic solutions and delve into significant theories, including diffusion, argumentation, and constructivism, to name a few. Intended for environmental professionals, researchers, and educators in the geophysical and social sciences, the book emphasizes communication principles and practices within an up-to-the-minute context of new environmental issues, new technologies, and a new focus on resiliency.

A Foundation for the Future

Science and Practice

A New Generation of Geostationary Environmental Satellites

Assessment of Climate Change over the Indian Region

Autonomous

Data Management, Analytics and Innovation

Comprehensive and up-to-date information on Earth's most dominant year-to-year climate variation The El Niño Southern Oscillation (ENSO) in the Pacific Ocean has major worldwide social and economic consequences through its global scale effects on atmospheric and oceanic circulation, marine and terrestrial ecosystems, and other natural systems. Ongoing climate change is projected to significantly alter ENSO's dynamics and impacts. El Niño Southern Oscillation in a Changing Climate presents the latest theories, models, and observations, and explores the challenges of forecasting ENSO as the climate continues to change. Volume highlights include: Historical background on ENSO and its societal consequences Review of key El Niño (ENSO warm phase) and La Niña (ENSO cold phase) characteristics Mathematical description of the underlying physical processes that generate ENSO variations Conceptual framework for understanding ENSO changes on decadal and longer time scales, including the response to greenhouse gas forcing ENSO impacts on extreme ocean, weather, and climate events, including tropical cyclones, and how ENSO affects fisheries and the global carbon cycle Advances in modeling, paleo-reconstructions, and operational climate forecasting Future projections of ENSO and its impacts Factors influencing ENSO events, such as inter-basin climate interactions and volcanic eruptions The American Geophysical Union promotes discovery in Earth and space science for the benefit of humanity. Its publications disseminate scientific knowledge and provide resources for researchers, students, and professionals.

This book provides state-of-the-art reviews of key issues and recent developments relating to chronic myeloid leukemia (CML), acquainting the reader with advances in research, treatment, and promotion of public health. Among the management topics addressed are the choices, advantages, and pitfalls of first-, second-, and third-line treatments: the European LeukemiaNet recommendations; management of adverse effects of tyrosine kinase inhibitors (TKI); management of CML blast crisis; management of pregnancy in the context of CML; the role of hematopoietic cell transplantation; the current experience with TKI discontinuation; and the value of interferon γ in improving the outcome of TKI treatment. Various aspects of relevance to treatment outcome are discussed, including prognostic scores, molecular monitoring (principles and interlaboratory standardization), and response-related predictors of survival. Furthermore, updates are provided on the increasing prevalence of CML and its implications and on the changing cost of care for CML, taking into account the forthcoming impact of availability of generic imatinib.

This book is a timely textbook that covers all aspects of neuroendocrine tumors (NET) from epidemiology, pathological classification and evaluation and molecular biology through to diagnostic imaging methods and therapeutic options, including the latest targeted therapies. The various types of NET are individually discussed, including carcinoid tumors, insulinomas, gastrinomas, glucagonomas, VIPomas, somatostatinomas, PPomas, medullary thyroid carcinomas, adrenocortical cancer, pheochromocytomas, paragangliomas and non-functioning pancreatic NETs. The contributing authors are internationally recognized experts who bring a wealth of experience to the subject. This book will be an invaluable source of information for practicing medical oncologists, surgeons, endocrinologists, gastroenterologists and pathologists and also trainees.

Hilo, Hawaii, monthly summary

March's Advanced Organic Chemistry

Northern Hemisphere data tabulations

A Report of the Ministry of Earth Sciences (MoES), Government of India

Advanced Organic Chemistry

Daily Series, Synoptic Weather Maps

Collection of the monthly climatological reports of the United States by state or region with monthly and annual national summaries.

Integrating scientific knowledge with today's most effective treatment options, Addiction Medicine: Science and Practice, 2nd Edition, provides a wealth of information on addictions to substances and behavioral addictions. It discusses the concrete research on how the brain and body are affected by addictions, improving your understanding of how patients develop addictions and how best to personalize treatment and improve outcomes. This essential text is ideal for anyone who deals with patients with addictions in clinical practice, including psychiatrists, health psychologists, pharmacologists, social workers, drug counselors, trainees, and general physicians/family practitioners. Clearly explains the role of brain function in drug taking and other habit-forming behaviors, and shows how to apply this biobehavioral framework to the delivery of evidence-based treatment. Provides clinically relevant details on not only traditional sources of addiction such as cocaine, opiates, and alcohol, but also more recently recognized substances of abuse (e.g., steroids, inhalants) as well as behavioral addictions (e.g., binge eating, compulsive gambling, hoarding). Discusses current behavioral and medical therapies in depth, while also addressing social contexts that may affect personalized treatment. Contains new information on compliance-enhancing interventions, cognitive behavioral treatments, behavioral management, and other psychosocial interventions. Includes neurobiological, molecular, and behavioral theories of addiction, and includes a section on epigenetics. Contains up-to-date information throughout, including a new definition of status epilepticus, a current overview of Lennox Gastaut syndrome, and updates on new FDA-approved drugs for pediatric neurological disorders. Features expanded sections on evidence-based treatment options including pharmacotherapy, pharmacogenetics, and potential vaccines. Addresses addiction in regards to specific populations, including adolescents, geriatric, pregnant women, and health care professionals. Includes contributions from expert international authors, making this a truly global reference to addiction medicine.

This open access book seeks to identify the ethical spirit of European Union (EU) law, a context in which we can observe a trend towards increasing references to the terms 'ethics' and 'morality'. This aspect is all the more important because EU law is now affecting more and more areas of national law, including such sensitive ones as the patentability of human life. Especially when unethical behaviour produces legal consequences, the frequent lack of clearly defined concepts remains a challenge, particularly against the background of the principle of legal certainty. This raises the question to which extent the content of these references is determined and whether it is possible to identify an ethical spirit of EU law. Answering that question, in turn, entails addressing the following questions: In references to ethics concerning EU law, can we identify references to a particular theory of practical philosophy at all; and, if so, to one or more normative ethical theories (deontology, consequentialism, or virtue ethics)? Further, should these non-legal concepts be imported in an unaltered way ('absolute approach'), or be adapted to the legal context ('relative approach')? This book explores the different layers of EU law (primary law, agreements, secondary law, and tertiary law), including the role of ethics in EU lawmaking and in EU case law, as well as the implementation of relevant EU directives in selected Member States. In addition to the above-mentioned normative philosophical lens, the book also analyzes the findings from the legal lens of EU integration, i.e., especially EU values, human rights and the cornerstone of human dignity.

New Trends in Earth-Science Outreach and Engagement

Remote Sensing of Pollutants Computerized Reduction of Long-path Absorption Data

Recommendations on the Transport of Dangerous Goods: Model ...

Immunosenescence and Clinical Consequences

Tecklin's Pediatric Physical Therapy

Neuroendocrine Tumours

Collection of the monthly climatological reports of the United States by state or region with monthly and annual National summaries.

The GOES-R Series: A New Generation of Geostationary Environmental Satellites introduces the reader to the most significant advance in weather technology in a generation. The world's new constellation of geostationary operational environmental satellites (GOES) are in the midst of a drastic revolution with their greatly improved capabilities that provide orders of magnitude improvements in spatial, temporal and spectral resolution. Never before have routine observations been possible over such a wide area. Imagine satellite images over the full disk every 10 or 15 minutes and monitoring of severe storms, cyclones, fires and volcanic eruptions on the scale of minutes. Introduces the GOES-R Series, with chapters on each of its new products Provides an overview of how to read new satellite images Includes full-color images and online animations that demonstrate the power of this new technology The two-part, fifth edition of Advanced Organic Chemistry has been substantially revised and reorganized for greater clarity. The material has been updated to reflect advances in the field since the previous edition, especially in computational chemistry. Part A covers fundamental structural topics and basic mechanistic types. It can stand-alone; together, with Part B: Reaction and Synthesis, the two volumes provide a comprehensive foundation for the study in organic chemistry. Companion websites provide digital models for study of structure, reaction and selectivity for students and exercise solutions for instructors.

Addiction Medicine E-Book

Cross-Cultural Psychology

Broadening the Use of Machine Learning in Hydrology

Large-Scale and Full-Scale Methods for Examining Wind Effects on Buildings

An Introduction to Nephroprotective Plants

The Ethical Spirit of EU Law

This open access book discusses the impact of human-induced global climate change on the regional climate and monsoons of the Indian subcontinent, adjoining Indian Ocean and the Himalayas. It documents the regional climate change projections based on the climate models used in the IPCC Fifth Assessment Report (AR5) and climate change modeling studies using the IITM Earth System Model (ESM) and CORDEX South Asia datasets. The IPCC assessment reports, published every 6–7 years, constitute important reference materials for major policy decisions on climate change, adaptation, and mitigation. While the IPCC assessment reports largely provide a global perspective on climate change, the focus on regional climate change aspects is considerably limited. The effects of climate change over the Indian subcontinent involve complex physical processes on different space and time scales, especially given that the mean climate of this region is generally shaped by the Indian monsoon and the unique high-elevation geographical features such as the Himalayas, the Western Ghats, the Tibetan Plateau and the adjoining Indian Ocean, Arabian Sea, and Bay of Bengal. This book also presents policy relevant information based on robust scientific analysis and assessments of the observed and projected future climate change over the Indian region.

This book focuses on the question of theological paradox, exploring what it means and its place in theological method from a Christian perspective. Just as paradoxes are unavoidable in logic and mathematics, paradoxes are inevitable in religious and theological discourses. The chapters in this volume examine a number of cases, including the 'Red Heifer paradox', the 'liar paradox', and the 'paradox of omnipotence', and attention is given to Christian doctrines such as the Trinity and the Incarnation. Arguing for a renewed understanding and appreciation of the role of paradox, this study will be of interest to scholars of theology and the philosophy of religion.

Piezoelectric Ceramics focuses on the relationship between piezoelectricity and ferroelectricity as they apply to ceramics, taking into consideration the properties of materials that are being used and possibly be used in the industries. Composed of 12 chapters, the book starts by tracing the history of piezoelectricity and how this affects ceramics. The different measurement techniques are discussed, including dielectric, ferroelectric, and piezoelectric measurements. The book proceeds by discussing Perovskite structure and barium titanate. Covered areas include electric field, piezoelectric properties, particle size effect, and dielectric strength. The properties, compositions, and reactions of various perovskites are discussed. Numerical analyses are presented in this regard. The book also offers interpretations of the experiments conducted. The discussions end with the processes involved in the manufacture and applications of piezoelectric ceramics. Concerns in manufacturing include calcination, grinding, mixing, electroding, firing, and quality control. Piezoelectric ceramics are applied in air transducers, instrument transducers, delay line transducers, underwater sound ultrasonic power, and wave filters. The book is important for readers interested in doing research on ceramics.

Part A: Structure and Mechanisms

Critical Thinking and Contemporary Applications, Sixth Edition

Chronic Myeloid Leukemia

Congo Basin Hydrology, Climate, and Biogeochemistry

Theoretical Basis

The GOES-R Series

Trusted for decades by Physical Therapy students as well as experienced therapists who want to improve their knowledge, Tecklin's Pediatric Physical Therapy provides a comprehensive and logical overview of some of the most common pediatric physical therapy diagnoses. This straightforward approach presents basic medical information regarding common clinical therapy examination, intervention and special considerations within each diagnostic group. Content in this 6th Edition has been thoroughly updated and reorganized to help prepare students for today's clinical challenges, accompanied by case studies and interactive features that reinforce understanding and instill the clinical decision-making skills essential to success. Written in a conversational style that transforms complex ideas into accessible ones, this international best-seller provides an interdisciplinary review of the theories and research in cross-cultural psychology. The book's unique critical thinking framework, including Critical Thinking boxes, helps to develop analytical skills. Exercises interspersed throughout promote a

Point sections review controversial issues and opinions about behavior in different cultural contexts. Cross?Cultural Sensitivity boxes underscore the importance of empathy in communication. Numerous applications better prepare students for working in various multicultural contexts such as teaching, counseling, health care, and social work. The dynamic author team Eric Shiraev was raised in the former Soviet Union and David Levy is from Southern California. Sensation, perception, consciousness, intelligence, human development, emotion, motivation, social perception, interaction, psychological disorders, and applied topics are explored from cross?cultural perspectives. New to the 6th Edition: Over 200 recent references, particularly Middle East, Africa, Asia, & Latin America as well as the US and Europe. New chapter on personality and the self with an emphasis on gender identity. New or revised chapter opening vignettes that draw upon current events. More examples related to the experiences of international students in the US and indigenous people. Many more figures and tables that appeal to

beliefs, parenting styles, sexual orientation, ethnic identity and stereotypes, conflict resolution, immigration, intelligence, physical abuse, states of consciousness, DSM-5, cultural customs, evolutionary psychology, treatment of psychological disorders, and acculturation. Revised methodology chapter with more attention to issues related specifically to cross-cultural companion website at www.routledge.com/9781138668386 where instructors will find a test bank containing multiple choice, true and false, short answer, and essay questions and answers for each chapter, and a complete set of tables and figures from the text; and students will find chapter outlines, flashcards of key terms, and links to further resources and t

cultural psychology, multicultural psychology, cultural psychology, cultural diversity, and the psychology of ethnic groups and a resource for practitioners, researchers, and educators who work in multicultural environments.

This book presents the latest findings in the areas of data management and smart computing, machine learning, big data management, artificial intelligence, and data analytics, along with advances in network technologies. The book is a collection of peer-reviewed research papers presented at Fifth International Conference on Data Management, Analytics and Innovat

in a virtual mode. It addresses state-of-the-art topics and discusses challenges and solutions for future development. Gathering original, unpublished contributions by scientists from around the globe, the book is mainly intended for a professional audience of researchers and practitioners in academia and industry.

Metals Abstracts

Piezoelectric Ceramics

Natural Products from Actinomycetes

Ion Channels in Biophysics and Physiology

Climatological Data

Precipitation Science

Comprehensive Remote Sensing covers all aspects of the topic, with each volume edited by well-known scientists and contributed to by frontier researchers. It is a comprehensive resource that will benefit both students and researchers who want to further their understanding in this discipline. The field of remote sensing has quadrupled in size in the past two decades, and increasingly draws in individuals working in a diverse set of disciplines ranging from geographers, oceanographers, and meteorologists, to physicists and computer scientists. Researchers from a variety of backgrounds are now accessing remote sensing data, creating an urgent need for a one-stop reference work that can comprehensively document the development of remote sensing, from the basic principles, modeling and practical algorithms, to various applications. Fully comprehensive coverage of this rapidly growing discipline, giving readers a detailed overview of all aspects of Remote Sensing principles and applications Contains 'Layered content', with each article beginning with the basics and then moving on to more complex concepts Ideal for advanced undergraduates and academic researchers Includes case studies that illustrate the practical application of remote sensing principles, further enhancing understanding

Precipitation Science: Measurement, Remote Sensing, Microphysics and Modeling addresses the latest key concerns for researchers in precipitation science, mainly observing, measuring, modeling and forecasting. Using case studies and global examples, the book demonstrates how researchers are addressing these issues using state-of-the-art methods and models to improve accuracy and output across the field. In the process, it covers such topics as discrepancies between models and observations, precipitation estimations, error assessment, droplet size distributions, and using data in forecasting and simulations. Other sections cover improved standard approaches, novel approaches, and coverage of a variety of topics such as climatology, data records, and more. By providing comprehensive coverage of the most up-to-date approaches to understanding, modeling, and predicting precipitation, this book offers researchers in atmospheric science, hydrology and meteorology with a comprehensive resource for improving outcomes and advancing knowledge. Provides updated and novel approaches to key issues in precipitation research Offers practical knowledge through global examples and case studies Includes full-color visuals to enhance comprehension of key concepts

Proceedings of ICDMAI 2021, Volume 2

Satellite Measurements of Clouds and Precipitation

Measurement, Remote Sensing, Microphysics and Modeling

Palliative Psychology

Information Quality and Governance for Business Intelligence

Exploring Theological Paradoxes