

Converge Landis Gyr

With the growth of renewable energy sources, microgrids have become a key component in the distribution of power to localized areas while connected to the traditional grid or operating in a disconnected island mode. Based on the extensive real-world experience of the authors, this cutting-edge resource provides a basis for the design, installation, and day-by-day coverage of the critical aspects they need to understand, from the initial planning and the selection of the most appropriate technologies and equipment, to optimal management and real-time control. Moreover, this forward-looking book places emphasis on new architectures of the energy systems of the future. Written in accessible language with practical examples, optimization algorithms for energy management systems, control issues for both on-grid and island mode, and microgrid protection. Practitioners are also provided with a complete vision for the deployment of the microgrid in smart cities.

This book discusses in detail molecular, mycobiont culture, biomonitoring and biospection of lichens, providing insights into advances in different fields of lichenology by applying modern techniques and approaches and examining how their application has enhanced or changed classical approaches. It offers a valuable resource, especially for beginners, students and backgrounds interested in the study of lichens. In recent years, the introduction of modern analytical techniques and approaches has significantly improved our understanding of the environment, including lichens. Lichens are unique organisms which possess untapped potential as effective and reliable bioindicators, sources of therapeutic phytochemicals, and as excellent characteristics of lichens underline the need for a multidimensional approach to explore their potential in various fields of environment science, botany and chemistry. Modern techniques, especially molecular techniques, have greatly enriched the field of lichen taxonomy and its position in the plant kingdom, revealing little-known species and exploring their evolution. GIS approaches have established lichens as an ideal and reliable tool for monitoring air pollution. Advanced culture techniques have expanded the pharmacological applications of lichens, which was formerly restricted due to their small biomass. The advent of sophisticated analytical instrumentation has now facilitated the isolation and characterization of lichens' bioconcentrations, as well as the estimation of their stress responses at different levels of pollution. As lichen diversity is adversely affected by increasing air pollution, there is a pressing need to develop effective management practices to conserve, restore and document lichen diversity.

This volume presents an exhaustive overview of major orebodies and mineral deposits of North Africa. It is intended both for academic researchers and especially for exploration geologists interested in mineral exploration in the northern part of the African continent. Recent changes in the mining laws of most countries in this region have encouraged international mineral industries. Accordingly, this volume will be very useful for these professionals, as well as for researchers in the field of economic geology.

Smart Grids
Recent Advances in Lichenology
Astrobiology
Stakeholder Engagement: Clinical Research Cases
Comparative Evolutionary, Morphological, Functional, and Molecular Perspectives
Electricity Transmission

A comprehensive textbook covering the design of dosage forms and all aspects of drug delivery systems. 'Pharmaceutics' in its broadest sense is the 'art of the apothecary' or, in simple terms, pharmaceutical preparations. It remains a diverse subject in the pharmacy curriculum, encompassing design of drugs, their manufacture, and the elimination of micro-organisms from the products. This books encompasses all those areas and pays particular attention to the design of dosage forms and their manufacture.

What exactly is smart grid? Why is it receiving so much attention? What are utilities, vendors, and regulators doing about it? Answering these questions and more, Smart Grids: Infrastructure, Technology, and Solutions gives readers a clearer understanding of the drivers and infrastructure of one of the most talked-about topics in the electric utility market—smart grid. This book brings together the knowledge and views of a vast array of experts and leaders in their respective fields. Key Features Describes the impetus for change in the electric utility industry Discusses the business drivers, benefits, and market outlook of the smart grid initiative Examines the technical framework of enabling technologies and smart solutions Identifies the role of technology developments and coordinated standards in smart grid, including various initiatives and organizations helping to drive the smart grid effort Presents both current technologies and forward-looking ideas on new technologies Discusses barriers and critical factors for a successful smart grid from a utility, regulatory, and consumer perspective Summarizes recent smart grid initiatives around the world Discusses the outlook of the drivers and technologies for the next-generation smart grid Smart grid is defined not in terms of what it is, but what it achieves and the benefits it brings to the utility, consumer, society, and environment. Exploring the current situation and future challenges, the book provides a global perspective on how the smart grid integrates twenty-first-century technology with the twentieth-century power grid. CRC Press Authors Speak Stuart Borlase speaks about his book. Watch the video

Eminent clinicians and specialists thoroughly review in great detail every aspect of pituitary tumors. The topics covered include prolactinomas, somatotroph adenomas, corticotroph adenomas, thyrotroph adenomas, nonfunctioning tumors, pituitary tumors, invasive adenomas, and pituitary carcinomas, as well as lesions, exclusive of pituitary adenomas, that occur in the sellar region. Also discussed are the new methods in endocrine diagnosis, high resolution imaging, receptor-mediated pharmacotherapy, microsurgical techniques, improved methods of radiation delivery, and the development of a precise and physiologically meaningful classification of pituitary tumors. Much-needed and brilliantly multidisciplinary, Diagnosis and Management of Pituitary Tumors offers all those dealing with pituitary cancer patients today's most comprehensive guide to diagnosis and treatment, one whose coordinated treatment strategies have sharply improved long-term survival rates for many patients.

Bioengineering Aspects in the Design of Gas Exchangers

Electric Power Distribution Handbook

Computational Thermochemistry

Physikalische Berichte

A Primer

SWISS Technics

This book shows the patterns of the fuzzy front end of innovation and how it can be managed successfully. Topics in this book cover traditional instruments and processes such as technology monitoring, market-oriented research management, lead-user developments, but also modern approaches such as frontloading, user community-driven innovation, crowdsourcing, anthropological expeditions, technological listening posts in global R&D settings, cross-industry innovation processes, open innovation, and IP cycle management. Contributions are based on latest research and cases studies on this new paradigm. The authors investigate this phenomenon, linking the practice of the early innovation phase to the established body of innovation research. Conceptual articles complement case studies to provide the reader with insight on managing the fuzzy front end of innovation. Lessons learned with success factors and checklists complement each chapter.

This book is a compendium of key scientific questions, challenges, and opportunities across different areas of exoplanetary science. The field is currently experiencing rapid growth, and the book provides a front-row view of the advancements at the cutting-edge of the field. Each chapter contains a short exposition on the most important open questions, challenges, and opportunities in a specific area from the perspective of one or more top experts in the area. It provides a starting point for researchers, experts and non-experts alike, to obtain a quick overview of the forefront of exoplanetary science and a vision for the future of the field. Topics range from observational developments and techniques, including exoplanet detection and characterisation methods and state-of-the-art and future missions, to exoplanet theory and modelling including planet formation, planetary interiors, atmospheres, habitability and the search for life.

This book bridges a gap in the literature by bringing together leading specialists from different backgrounds. It addresses the specific need for a readable book on this very interdisciplinary and new topic at research level.

Diagnosis and Management of Pituitary Tumors

Gazette OMPI des marques internationales

Pharmaceutics

Technological Development and Competition

Official Gazette of the United States Patent and Trademark Office

Prediction and Estimation of Molecular Thermodynamics

The multiverse is a concept that acknowledges the existence of a multiplicity of worlds or universes. The designs of these universes do not have to be the same as our universe, but we have no clear view of what the "other" designs might be. It is suspected that they can obey different laws of physics and different constants of physics, which further implies different chemistry, biology, and life. Some say that the universes within the multiverse allow for different mathematics or even for different metamathematical logic. This book discusses most of the above aspects of the multiverse concept starting with the philosophy, through all the mathematical and physical subtleties, finally exploring the origin of life and consciousness. This book provides a satisfying intellectual exploration of front-edge advances in contemporary cosmology.

Comprises 20 contributions which grew from the August 1996 symposium. Representative paper topics include estimating phase-change enthalpies and entropies, electrostatic-covalent model parameters for molecular modeling, complete basis-set thermochemistry and kinetics, modeling free energies of solvation and transfer, use of density functional methods to compute heats of reaction, and a density functional study of periodic trends in bond energies. Together the contributions describe all the major methods used for estimating or predicting molecular thermochemistry. Appends information on software and databases for thermochemistry, essential statistical thermodynamics, and worked examples. Annotation copyrighted by Book News, Inc., Portland, OR

This book encapsulates over three decades of the author's work on comparative functional respiratory morphology. It provides insights into the mechanism(s) by which respiratory means and processes originated and advanced to their modern states. Pertinent cross-disciplinary details and facts have been integrated and reexamined in order to arrive at more robust answers to questions regarding the basis of the functional designs of gas exchangers. The utilization of oxygen for energy production is an ancient process, the development and progression of which were underpinned by dynamic events in the biological, physical, and chemical worlds. Many books that have branched the subject of comparative functional respiratory biology have only described the form and function of the "end-product," the gas exchanger; they have scarcely delved into the factors and the conditions that motivated and steered the development from primate to modern respiratory means and processes. This book addresses and answers broad questions concerning the critical synthesis of multidisciplinary data, and clarifies previously cryptic aspects of comparative respiratory biology.

Practical Methods and Applications

Power Distribution System Reliability

Proceedings

Leap

Incorporating Women

Utilities Telecommunications News

Utilities Telecommunications NewsInformation Gatekeepers Includustrial Communication Technology HandbookCRC Press

This book offers a case-study approach to stakeholder theory that moves beyond theoretical analysis to the applied. As stakeholder theory has moved into the mainstream of management thinking in business ethics and a number of the management disciplines, there is an increasing need to explore the subtleties of stakeholder engagement via examples from practice. The case studies in this volume explore a number of aspects of the idea of stakeholder engagement, via the method of clinical case studies. Edited by leading scholars in the field of business ethics and stakeholder theory, this text affords a solid grounding in theory, brought to new levels of applied understanding of stakeholder engagement.

Of the "big three" components of electrical infrastructure, distribution typically gets the least attention. In fact, a thorough, up-to-date treatment of the subject hasn't been published in years, yet deregulation and technical changes have increased the need for better information. Filling this void, the Electric Power Distribution Handbook delivers comprehensive, cutting-edge coverage of the electrical aspects of power distribution systems. The first few chapters of this pragmatic guidebook focus on equipment-oriented information and applications such as choosing transformer connections, sizing and placing capacitors, and setting regulators. The middle portion discusses reliability and power quality, while the end tackles lightning protection, grounding, and safety. The Second Edition of this CHOICE Award winner features: 1 new chapter on overhead line performance and 14 fully revised chapters incorporating updates from several EPRI projects New sections on voltage optimization, arc flash, and contact voltage Full-color illustrations throughout, plus

fresh bibliographic references, tables, graphs, methods, and statistics Updates on conductor burndown, fault location, reliability programs, tree contacts, automation, and grounding and personnel protection Access to an author-maintained support website, distributionhandbook.com, with problems sets, resources, and online apps An unparalleled source of tips and solutions for improving performance, the Electric Power Distribution Handbook, Second Edition provides power and utility engineers with the technical information and practical tools they need to understand the applied science of distribution.

Handbook of Exoplanets

The Hippocampus as a Cognitive Map

The Multiverse

Implications for our Future Lives

Family Capitalism

This volume provides a comprehensive review of historical and current research on the function of the frontal lobes and frontal systems of the brain. The content spans frontal lobe functions from birth to old age, from biochemistry and anatomy to rehabilitation, and from normal to disrupted function. The book is intended to be a standard reference work on the frontal lobes for researchers, clinicians, and students in the field of neurology, neuroscience, psychiatry, psychology, and health care.

This state-of-the-art reference work includes over 15 sections dealing with all aspects of exoplanets and exobiology research, including historic aspects, the Solar System as a template, objects at the planet-to-star transition, exoplanet detection and characterization with related instrumentation, technology and software tools, planetary and planet-system statistics with recent and planned surveys, the atmosphere and formation and evolution processes, habitability and exobiology implications, and outlooks for future exploration and science development, including visionary contributions. Each section has 10-20 contributions written by the top experts in their subject, including both senior researchers as well as young, smart researchers who represent the future of the discipline. All in all, this handbook comprehensively tackles one of the most challenging and dynamic fields of modern astronomy and astrophysics.

Is Earth the right model and the only universal key to understand habitability, the origin and maintenance of life? Are we able to detect life elsewhere in the universe by the existing techniques and by the upcoming space missions? This book tries to give answers by focusing on environmental properties, which are playing a major role in influencing planetary surfaces or the interior of planets and satellites. The book gives insights into the nature of planets or satellites and their potential to harbor life. Different scientific disciplines are searching for the clues to classify planetary bodies as a habitable object and what kind of instruments and what kind of space exploration missions are necessary to detect life. Results from model calculations, field studies and from laboratory studies in planetary simulation facilities will help to elucidate if some of the planets and satellites in our solar system as well as in extra-solar systems are potentially habitable for life.

Infrastructure, Technology, and Solutions

Physics Briefs

ExoFrontiers

How to Thrive in a World Where Everything Can Be Copied

Trademarks

Journal of Current Laser Abstracts

A practical, hands-on approach to power distribution system reliability As power distribution systems age, the frequency and duration of consumer interruptions will increase significantly. Now more than ever, it is crucial for students and professionals in the electrical power industries to have a solid understanding of designing the reliable and cost-effective utility, industrial, and commercial power distribution systems needed to maintain life activities (e.g., computers, lighting, heating, cooling, etc.). This books fills the void in the literature by providing readers with everything they need to know to make the best design decisions for new and existing power distribution systems, as well as to make quantitative "cost vs. reliability" trade-off studies. Topical coverage includes: Engineering economics Reliability analysis of complex network configurations Designing reliability into industrial and commercial power systems Application of zone branching reliability methodology Equipment outage statistics Deterministic planning criteria Customer interruption for cost models for load-point reliability

Power distribution system reliability is an ancient process, the development and progression of which were underpinned by dynamic events in the biological, physical, and chemical worlds. Many books that have branched the subject of comparative functional respiratory biology have only described the form and function of the "end-product," the gas exchanger; they have scarcely delved into the factors and the conditions that motivated and steered the development from primate to modern respiratory means and processes. This book addresses and answers broad questions concerning the critical synthesis of multidisciplinary data, and clarifies previously cryptic aspects of comparative respiratory biology.

An updated, practical guide to bioinorganic chemistry Bioinorganic Chemistry: A Short Course, Second Edition provides the fundamentals of inorganic chemistry and biochemistry relevant to understanding bioinorganic topics. Rather than striving to provide a broad overview of the whole, rapidly expanding field, this resource provides essential background material, followed by detailed information on selected topics. The goal is to give readers the background, tools, and skills to research and study bioinorganic topics of special interest to them. This extensively updated premier reference and text: Presents review chapters on the essentials of inorganic chemistry and biochemistry Includes up-to-date information on instrumental and analytical techniques and computer-aided modeling and visualization programs Familiarizes readers with the primary literature sources and online resources includes detailed coverage of Group 1 and 2 metal ions, concentrating on biological molecules that feature sodium, potassium, magnesium, and calcium ions Describes proteins and enzymes with iron-containing porphyrin ligand systems-myoglobin, hemoglobin, and the ubiquitous cytochrome metalloenzymes-and the non-heme, iron-containing proteins aconitase and methane monooxygenase Appropriate for one-semester bioinorganic chemistry courses for chemistry, biochemistry, and biology majors, this text is ideal for upper-level undergraduate and beginning graduate students alike

Essentials of Computational Chemistry provides a balanced introduction to this dynamic subject. Suitable for both experimentalists and theorists, a wide range of samples and applications are included drawn from all key areas. The book carefully leads the reader through the necessary equations providing information explanations and reasoning where necessary and firmly placing each equation in context.

Wendels, Haniels, Falcks, and the Continental European Model

Habitability of Other Planets and Satellites

Big Questions in Exoplanetary Science

1992 URSI International Symposium on Signals, Systems, and Electronics, ISSSE '92 : Conservatoire National Des Arts Et Métiers, Paris, France, September 1-4, 1992

Life on Land

British Abstracts

Every business faces the existential threat of competitors producing cheaper copies. Even patent filings, market dominance and financial resources can't shield them from copycats. So what can we do—and, what can we learn from companies that have endured and even prospered for centuries despite copycat competition? In a book of narrative history and practical strategy, IMD professor of management and innovation Howard Yu shows that succeeding in today's marketplace is no longer just a matter of mastering copycat tactics, companies also need to leap across knowledge disciplines, and to reimagine how a product is made or a service is delivered. This proven tactic can protect a company from being overtaken by new (and often foreign) copycat competitors. Using riveting case studies of successful leaps and tragic falls, Yu illustrates five principles to success that span a wide range of industries, countries, and eras. Learn about how P&G in the 19th century made the leap from handcrafted soaps and candles to mass production of its signature brand Ivory, leaped into the new fields of consumer psychology and advertising, then leaped again, at the risk of cannibalizing its core product, into synthetic detergents and won with Tide in 1946. Learn about how Novartis and other pharma pioneers stayed ahead by making leaps from chemistry to microbiology to genomics in drug discovery, and how forward-thinking companies, including China's largest social media app—WeChat, Tokyo-based Internet service provider Recruit Holdings, and Illinois-headquartered John Deere are leaping ahead by leveraging the emergence of ubiquitous connectivity, the inexorable rise of intelligent machines, and the rising importance of managerial creativity. Outlasting competition is difficult; doing so over decades or a century is nearly impossible—unless one leaps. Ultimately, Leap is a manifesto for how pioneering companies can endure and prosper in a world of constant change and inevitable copycats.

The problems related to the process of industrialisation such as biodiversity depletion, climate change and a worsening of health and living conditions, especially but not only in developing countries, intensify. Therefore, there is an increasing need to search for integrated solutions to make development more sustainable. The United Nations has acknowledged the problem and approved the (2030 Agenda for Sustainable Development). On 1st January 2016, the 17 Sustainable Development Goals (SDGs) of the Agenda officially came into force. These goals cover the three dimensions of sustainable development: economic growth, social inclusion and environmental protection. The Encyclopedia of the UN Sustainable Development Goals comprehensively addresses the SDGs in an integrated way. It encompasses 17 volumes, each one devoted to one of the 17 SDGs. This volume addresses SDG 15, namely "Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss" and contains the description of a range of terms, which allow a better understanding and foster knowledge. Concretely, the defined targets are: Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements Promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally Combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world Ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and protect and prevent the extinction of threatened species Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products Introduce measures to prevent the introduction and significantly Reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species Integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities Editorial Board Alexandra Aragão, Desalegn Yayah Ayal, Ayansina Ayanlade, Anabela Marisa Azal, Adriana Consorte-McCrea, Muhammad Farooq, Ana Catarina Luz, Maria P. Martin, Sharif A. Mukul, Nandhivarmam Muthu, Robert Russell Monteith Paterson, Isabel Ruiz-Mallén

This history of three powerful family firms located in different European countries takes place over a period of more than two hundred years. The interplay and the changing social and legal arrangements of the families shaped the development of a European capitalism quite different from the Anglo-American variety. Qualifying claims by Alfred Chandler and David Landes that family firms tend to be dysfunctional, Harold James shows how and why these steel and engineering firms were successful over long periods of time. Indeed, he sees the family enterprise as particularly conducive to managing risk during periods of upheaval and uncertainty when both states and markets are disturbed. He also identifies the key roles played by women executives during such times. In "Family Capitalism," James tells how "iron masters" of a classical industrial cast were succeeded by new generations who wanted to shift to information-age systems and technologies, and how families and firms wrestled with social and economic changes that occasionally tore them apart. Finally, the author shows how the trajectories of the firms were influenced by political, military, economic, and social events and how these firms illuminate a European model of "relationship capitalism."

Post-Innovation Performance

Principles of Frontal Lobe Function

Mineral Deposits of North Africa

Essentials of Computational Chemistry

Microgrid Design and Operation: Toward Smart Energy in Cities

New Mega Trends

Angel Kwolck-Folland presents an authoritative, much-needed survey of women in business from the 1600s to the present day. She introduces some of the women--famous, infamous, and forgotten--who have been central to business throughout US history as workers, managers, and professionals. This stimulating narrative challenges our expectations about both the history of women and the history of business as it focuses on the changing legal and social climate for women's economic activities through the centuries.

Featuring contributions from major technology vendors, industry consortia, and government and private research establishments, the Industrial Communication Technology Handbook, Second Edition provides comprehensive and authoritative coverage of wire- and wireless-based specialized communication networks used in plant and factory automation, automotive applications, avionics, building automation, energy and power systems, train applications, and more. New to the Second Edition: 46 brand-new chapters and 21 substantially revised chapters Inclusion of the latest, most significant developments in specialized communication technologies and systems Addition of new application domains for specialized networks The Industrial Communication Technology Handbook, Second Edition supplies readers with a thorough understanding of the application-specific requirements for communication services and their supporting technologies. It is useful to a broad spectrum of professionals involved in the conception, design, development, standardization, and use of specialized communication networks as well as academic institutions engaged in engineering education and vocational training.

YOUR GUIDE TO A FULFILLING BUSINESS AND PERSONAL FUTURE Based on research by one of the world's largest growth-consulting companies, New Mega Trends identifies the ten most important global trends that will define our future, including business models, smart technology, connectivity and radical social trends. New Mega Trends will give you the tools to not only identify and evaluate these game-changing trends, but also help you to translate them into market opportunities for your everyday business and personal life. How will we travel to work in the cities of the future? Will zero be the new big thing? How will we stay connected in the Mega Trends World? Will our Wellness and Well-Being top business agenda? If you are a leader with a corporate vision, or a strategic planner within your organization, or just plain curious about your future, New Mega Trends will provide you with stimulating stories, startling facts and thought-provoking case studies that will not only inform your future but entertain you today.

Machine Design

Bioinorganic Chemistry

A Short Course

Management of the Fuzzy Front End of Innovation

The Science of Dosage Form Design

A History of Women and Business in the United States