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Discussions on the global economy focus on the hyper-mobility of capital, the possibility of instantaneous transmission of information and money around the globe, the centrality of information outputs to our economic systems and emphasise the neutralisation of geography and of places. What is ignored, however, is that even the most advanced information industries need a material infrastructure of buildings and work processes, and considerable agglomeration, in order to operate in global markets. Further, the globalisation of economic activity has brought with it not only a vast dispersal of offices and factories, but also a growing importance of central functions to manage and coordinate such worldwide networks of activities. The development of global urban projects is one manifestation of this move towards centrality in urban situations. These large-scale urban projects are the result of governments' seeking competitive advantage in the global economy. They are critical components of a nation's global infrastructure. In the booming economies of the Asia Pacific Rim prior to the Asian Economic Crisis these urban developments were seen as key components of national economic policies. In their making they require a conscious effort to arrange material infrastructure and reinforce that there is a role for urban design in this making. Emerging Urbanity is an exploration of this role in nine global urban projects in the Asia Pacific Rim.

An up-to-date, practical guide on upgrading from silicon to GaN, and how to use GaN transistors in power conversion systems design This updated, third edition of a popular book on GaN transistors for efficient power conversion has been substantially expanded to keep students and practicing power conversion engineers ahead of the learning curve in GaN technology advancements. Acknowledging that GaN transistors are not one-to-one replacements for the current MOSFET technology, this book serves as a practical guide for understanding basic GaN transistor construction, characteristics, and applications. Included are discussions on the fundamental physics of these power semiconductors, layout, and other circuit design considerations, as well as specific application examples demonstrating design techniques when employing GaN devices. GaN Transistors for Efficient Power Conversion, 3rd Edition brings key updates to the chapters of Driving GaN Transistors; Modeling, Simulation, and Measurement of GaN Transistors; DC-DC Power Conversion; Envelope Tracking; and Highly Resonant Wireless Energy Transfer. It also offers new chapters on Thermal Management, Multilevel Converters, and Lidar, and revises many others throughout. Written by leaders in the power semiconductor field and industry pioneers in GaN power transistor technology and applications Updated with 35% new material, including three new chapters on Thermal Management, Multilevel Converters, Wireless Power, and Lidar Features practical guidance on formulating specific circuit designs when constructing power conversion systems using GaN transistors A valuable resource for professional engineers, systems designers, and electrical engineering students who need to fully understand the state-of-the-art GaN Transistors for Efficient Power Conversion, 3rd Edition is an essential learning tool and reference guide that enables power conversion engineers to design energy-efficient, smaller, and more cost-effective products using GaN transistors.

This authoritative and multi-disciplinary book provides architects, lighting specialists, and anyone else working daylight into design, with all the tools needed to incorporate this most fundamental element of architecture. It includes: an overview of current practice of daylighting in architecture and urban planning a review of recent research on daylighting and what this means to the practitioner a global vision of architectural lighting which is linked to the climates of the world and which integrates view, sunlight, diffuse skylight and electric lighting up-to-date tools for design in practice delivery of information in a variety of ways for interdisciplinary readers: graphics, mathematics, text, photographs and in-depth illustrations a clear structure: eleven chapters covering different aspects of lighting, a set of worksheets giving step-by-step examples of calculations and design procedures for use in practice, and a collection of algorithms and equations for reference by specialists and software designers. This book should trigger creative thought. It recognizes that good lighting design needs both knowledge and imagination.

The Grand Staircase-Escalante National Monument in Utah is the location of one of the best-known terrestrial records for the late Cretaceous. A major effort in the new century has documented over 2,000 new vertebrate fossil sites, provided new radiometric dates, and identified five new genera of ceratopsids, two new species of hadrosaur, a probable new genus of hypsilophodontid, new pachycephalosaurs and ankylosaurs, several kinds of theropods (including a new genus of oviraptor and a new tyrannosaur), plus the most complete specimen of a Late Cretaceous therizinosaur ever collected from North America, and much more. At the Top of the Grand Staircase: The Late Cretaceous of Southern Utah documents this major stepping stone toward a synthesis of the ecology and evolution of the Late Cretaceous ecosystems of western North America.

To succeed in achieving its national security objectives the United States needs to use Associative Power in place of both Hard Power and Soft Power. Associative Power is the use of joint ventures and alliances to optimize the forms of power brought to bear in conflicts responding with precision to a spectrum of enemy threats, situational challenges, and political opportunities. Associative Power was wisely and successfully used by the United States in the Vietnam War through the CORDS program of counter insurgency and village development to defeat the Viet Cong insurgency and permit the withdrawal of American combat forces. Associative power was not used by the United States—nor was the best counter insurgency practices of CORDS—in the Iraq and Afghanistan conflicts. As a result of this omission, interim outcomes in Iraq and Afghanistan did not acceptably accomplish American objectives.

Fundamental Neuroscience, 3rd Edition introduces graduate and upper-level undergraduate students to the full range of contemporary neuroscience. Addressing instructor and student feedback on the previous edition, all of the chapters are rewritten to make this book more concise and student-friendly than ever before. Each chapter is once again heavily illustrated and provides clinical boxes describing experiments, disorders, and methodological approaches and concepts. Capturing the promise and excitement of this fast-moving field, Fundamental Neuroscience, 3rd Edition is the text that students will be able to reference throughout their neuroscience careers! New to this edition: 30% new material including new chapters on Dendritic Development and Spine Morphogenesis, Chemical Senses, Cerebellum, Eye Movements, Circadian Timing, Sleep and Dreaming, and

Consciousness Additional text boxes describing key experiments, disorders, methods, and concepts Multiple model system coverage beyond rats, mice, and monkeys Extensively expanded index for easier referencing

Colour and appearance perceptions are very complex psychological phenomena. Written by one of the foremost authorities in the field, Principles of Colour and Appearance Measurement is a major two-volume work addressing the key topics required to understand the issues and manage colour effectively. The book addresses how objects appear to viewers, how viewers perceive colour, and the major types of instrumentation used to measure colour. Chapters detail the characteristics of light sources and object colour and appearance attributes. They encompass the complexities of human visual perception, including the various causes and types of colour blindness, and other unusual visual phenomena. The book also covers colour measurement instruments and methods, as well as fluorescence and whiteness. Principles of Colour Appearance and Measurement is a comprehensive resource for designers, colour technologists, colour quality inspectors, product developers, and anyone who uses colour in their work. Addresses the key topics required to understand the issues of colour measure and management Examines how viewers perceive colour and how objects appear to them Reviews the major types of instrumentation used to measure colour

Customer satisfaction is a pivotal component to any business that provides goods or services to the public. By effectively managing the flow of products, business can adapt to the growing demands of consumers and deliver successful customer service. The Handbook of Research on Strategic Supply Chain Management in the Retail Industry is an authoritative reference source for the latest scholarly research on properly managing business processes in order to satisfy end-user requirements and increase competitive advantage in the retail marketplace. Highlighting concepts relating to field applications, customer relationships, and current trends in logistics management, this book is ideally designed for business professionals, managers, upper-level students, and researchers interested in innovative strategies and best practices in modern supply chains.

OCR A Level Year 2 Psychology has been written by a leading author-examiner team to match the 2015 OCR Psychology specification. This student book offers thorough preparation for exams, with knowledge covered in the right depth and dedicated exam support including practice questions and examiner commentaries.

Handbook of Research on Emergent Applications of Optimization AlgorithmsIGI Global

Cultural heritage is a vital, multifaceted component of modern society. To better protect and promote the integrity of a culture, certain technologies have become essential tools. The Handbook of Research on Emerging Technologies for Architectural and Archaeological Heritage is an authoritative reference source for the latest scholarly research on the use of technological assistance for the preservation of architecture and archaeology in a global context. Focusing on various surveying technologies for the study, analysis, and protection of historical buildings, this book is ideally designed for professionals, researchers, upper-level students, and practitioners.

The edited book Pesticides - Toxic Aspects contains an overview of attractive researchers of pesticide toxicology that covers the hazardous effects of common chemical pesticide agents employed every day in our agricultural practices. The combination of experimental and theoretical pesticide investigations of current interest will make this book of significance to researchers, scientists, engineers, and graduate students who make use of those different investigations to understand the toxic aspects of pesticides. We hope that this book will continue to meet the expectations and needs of all interested in different aspects of pesticide toxicity.

The mission of higher education in the 21st century must focus on optimizing learning for all students. In a shift from prioritizing effective teaching to active learning, it is understood that computer-enhanced environments provide a variety of ways to reach a wide range of learners who have differing backgrounds, ages, learning needs, and expectations. Integrating technology into teaching assumes greater importance to improve the learning experience. Optimizing Higher Education Learning Through Activities and Assessments is a collection of innovative research that explores the link between effective course design and student engagement and optimizes learning and assessments in technology-enhanced environments and among diverse student populations. Its focus is on providing an understanding of the essential link between practices for effective "activities" and strategies for effective "assessments," as well as providing examples of course designs aligned with assessments, positioning college educators both as leaders and followers in the cycle of lifelong learning. While highlighting a broad range of topics including collaborative teaching, active learning, and flipped classroom methods, this book is ideally designed for educators, curriculum developers, instructional designers, administrators, researchers, academicians, and students. Integrated studies on the assessment and improvement of soil and water quality have to deal almost inevitably with issues of scale, since the spatial support of measurements, the model calculations and the presentation of results usually vary. This book contains the selected and edited proceedings of a workshop devoted to issues of scale entitled: `Soil and Water Quality at Different Scales', which was held in 1996 in Wageningen. It is intended for environmental researchers, scientists and MSc and PhD students. Part 1 covers current issues and methodologies with scale related soil and water quality research. Part 2 covers agroecological and hydrological case studies in which scale transforms form an important part of the research chain. Part 3 consists of papers focusing on methodologies and up and downscaling. Part 4 contains review papers based on modellers' and statisticians' considerations as well as the papers and posters presented during the workshop. Part 5 consists of short research notes.

This edited volume presents the proceedings of the 20th CIRP LCE Conference, which cover various areas in life cycle engineering such as life cycle design, end-of-life management, manufacturing processes, manufacturing systems, methods and tools for sustainability, social sustainability, supply chain management, remanufacturing, etc.

The self-potential method enables non-intrusive assessment and imaging of disturbances in electrical currents of conductive subsurface materials. It has an increasing number of applications, from mapping fluid flow in the subsurface of the Earth to detecting preferential flow paths in earth dams and embankments. This book provides the first full overview of the fundamental concepts of this method and its applications in the field. It discusses a historical perspective, laboratory investigations undertaken, the inverse problem and seismoelectric coupling, and concludes with the application of the self-potential method to geohazards, water resources and hydrothermal systems. Chapter exercises, online datasets and analytical software enable the reader to put the theory into practice. This book is a key reference for academic researchers and professionals working in the areas of geophysics, environmental science, hydrology and geotechnical engineering. It will also be valuable reading for related graduate courses.

Precision agriculture is now 'main stream' in agriculture and is playing a key role as the industry comes to terms with the environment, market forces, quality requirements, traceability, vehicle guidance and crop management. Research continues to be necessary and needs to be reported and disseminated to a wide audience. This book contains peer reviewed papers presented at the 9th European Conference on Precision Agriculture, held in Lleida, Spain. The papers reflect the wide range of disciplines that impinge on precision agriculture: technology, crop science, soil science, agronomy, information technology, decision support, remote sensing and others. The broad range of research

topics reported will be a valuable resource for researchers, advisors, teachers and professionals in agriculture long after the conference has finished.

Everyone does research. Some just do it better than others. In this chaotic world of information and misinformation, referred to as "information fog," university students, in particular, need to learn how to conduct research effectively. Good research is about a quest to discover more, about a burning desire to solve society's problems and make a better world. Ultimately, research is a way forward to a resolution of life's greatest difficulties. In this seventh edition of Research Strategies: Finding Your Way through the Information Fog, author William Badke walks you step by step through the entire research process—from choosing a topic, to writing the final project, and everything in between. A seasoned researcher and educator, Badke offers tried-and-true tips, tricks, and strategies to help you identify a problem, acquire pertinent information, and use that information to address the problem. Employing a host of examples and humor, Research Strategies: Finding Your Way through the Information Fog shows how research can be exciting and fun.

They change color depending on their mood. They possess uniquely adapted hands and feet distinct from other tetrapods. They feature independently movable eyes. This comprehensive volume delves into these fascinating details and thorough research about one of the most charismatic families of reptiles—Chameleonidae. Written for professional herpetologists, scholars, researchers, and students, this book takes readers on a voyage across time to discover everything that is known about chameleon biology: anatomy, physiology, adaptations, ecology, behavior, biogeography, phylogeny, classification, and conservation. A description of the natural history of chameleons is given, along with the fossil record and typical characteristics of each genus. The state of chameleons in the modern world is also depicted, complete with new information on the most serious threats to these remarkable reptiles.

Table of contents

The Recovery of Natural Environments in Architecture challenges the modern practice of sealing up and mechanically cooling public scaled buildings in whichever climate and environment they are located. This book unravels the extremely complex history of understanding and perception of air, bad air, miasmas, airborne pathogens, beneficial thermal conditions, ideal climates and climate determinism. It uncovers inventive and entirely viable attempts to design large buildings, hospitals, theatres and academic buildings through the 19th and early 20th centuries, which use the configuration of the building itself and a shrewd understanding of the natural physics of airflow and fluid dynamics to make good, comfortable interior spaces. In exhuming these ideas and reinforcing them with contemporary scientific insight, the book proposes a recovery of the lost art and science of making naturally conditioned buildings.

This edited volume presents an interdisciplinary collection of texts that examine the practice of gamification, the use of game design elements in non-game contexts, specifically as an organization and management research problem. As we travel deeper into the twenty-first century, it is becoming increasingly clear the late modernity is re defining its take on games and play. Following what has been termed a general ludification or playification of society, corporations are beginning to see games and play as resources rather than as a wasteful practice. We are witnessing the emergence of the practice of gamificiation with the intention of mobilizing play's motivational power for capitalist production. This book outlines both the essential "how tos" and also critically explores their links to diverse strands of organization theory such as institutionalism, business ethics, critical theory and organizational behavior. Gamification research has been mostly conducted within disciplines such as information studies, game studies and information systems science. This is a paradoxical state of affairs; whilst gamification aims at being a transformative intervention in work processes and practices and is being deployed as such by practitioners. This

book will be of value to researchers, academics and students interested in management and organization studies.

Covering key topics in the field such as technological innovation, human-centered sustainable engineering and manufacturing, and manufacture at a global scale in a virtual world, this book addresses both advanced techniques and industrial applications of key research in interactive design and manufacturing. Featuring the full papers presented at the 2014 Joint Conference on Mechanical Design Engineering and Advanced Manufacturing, which took place in June 2014 in Toulouse, France, it presents recent research and industrial success stories related to implementing interactive design and manufacturing solutions.

Explanation and advice for students doing O Level English. O Level English India edition: written especially for students preparing for the O Level in English Language examination conducted by the University of Cambridge International Examinations; provides extensive explanation and advice to students to prepare for and succeed in the examination.

An essential resource for understanding the potential role for biomass energy with carbon capture and storage in addressing climate change Biomass Energy with Carbon Capture and Storage (BECCS) offers a comprehensive review of the characteristics of BECCS technologies in relation to its various applications. The authors — a team of expert professionals — bring together in one volume the technical, scientific, social, economic and governance issues relating to the potential deployment of BECCS as a key approach to climate change mitigation. The text contains information on the current and future opportunities and constraints for biomass energy, explores the technologies involved in BECCS systems and the performance characteristics of a variety of technical systems. In addition, the text includes an examination of the role of BECCS in climate change mitigation, carbon accounting across the supply chain and policy frameworks. The authors also offer a review of the social and ethical aspects as well as the costs and economics of BECCS. This important text: Reveals the role BECCS could play in the transition to a low-carbon economy Discusses the wide variety of technical and non-technical constraints of BECCS Presents the basics of biomass energy systems Reviews the technical and engineering issues pertinent to BECCS Explores the societal implications of BECCS systems Written for academics and research professionals, Biomass Energy with Carbon Capture and Storage (BECCS) brings together in one volume the issues surrounding BECCS in an accessible and authoritative manner.

Modern optimization approaches have attracted an increasing number of scientists, decision makers, and researchers. As new issues in this field emerge, different optimization methodologies must be developed and implemented. The Handbook of Research on Emergent Applications of Optimization Algorithms is an authoritative reference source for the latest scholarly research on modern optimization techniques for solving complex problems of global optimization and their applications in economics and engineering. Featuring coverage on a broad range of topics and perspectives such as hybrid systems, non-cooperative games, and cryptography, this publication is ideally designed for students, researchers, and engineers interested in emerging developments in optimization algorithms.

With more than 300 entries, these two volumes provide a one-stop source for a comprehensive overview of communication theory, offering current descriptions of theories as well as the background issues and concepts that comprise these theories. This is the first resource to summarize, in one place, the diversity of theory in the communication field. Key Themes Applications and Contexts Critical Orientations Cultural Orientations Cybernetic and Systems Orientations Feminist Orientations Group and Organizational Concepts Information, Media, and Communication Technology International and Global Concepts Interpersonal Concepts Non-Western Orientations Paradigms, Traditions, and Schools Philosophical Orientations Psycho-Cognitive Orientations Rhetorical Orientations Semiotic, Linguistic, and Discursive Orientations Social/Interactional Orientations Theory, Metatheory, Metatheory, and Inquiry

Principles of Sugar Technology focuses on the principles, methodologies, and processes involved in sugar technology, including properties of sugar and agents involved in its manufacture. The selection first offers information on the chemical and physical properties of sucrose, as well as decomposition, structure of the sucrose molecule, sucrose derivatives, crystallized and amorphous sucrose, and solvents. The book then takes a look at the physical and chemical properties of reducing sugars and non-nitrogenous organic acids of sugarcane. The publication ponders on nitrogen-containing nonsugars (amino acids and proteins), complex organic nonsugars of high molecular weight, and lipids of sugarcane. Discussions focus on the distribution of nitrogen in sugarcane, amino acids in cane juice and leaves, lignin, pectin, proteins, and significance of waxy and fatty lipids in sugar manufacture. The text also examines color and colored nonsugars, inorganic nonsugars, and agents used in sugar manufacture. The selection is a dependable reference for readers interested in sugar technology.

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