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Openbare veiling van drie kapitale hofsteden, een kapbosch en drie einden beplanten dijk, alles liggende in het eiland Noord-Beveland, alsmede vier vier-en-twintigste aandeelen in de meestof: De Hoop, staande te Geersdijk, Gemeente Wissekerke, door de Notarissen D.J. van der Horst Serlé en A. van den Broecke Az., residerende binnen de stad Middelburg, op vrijdag den 25 mei 1849, des voormiddags ten tien ure, in het Nederlandsch Logement, in de Abdij, binnen de stad Middelburg voornoemd - 1849

A Princeton Companion - Alexander Leitch
2015-03-08

In this unusual and unique volume, Alexander Leitch provides a warm, often witty, and always informative reference book on Princeton University. The collection of approximately 400 articles, alphabetically arranged and written by some seventy faculty members and alumni in addition to the author, covers all aspects of Princeton life in the past as well as in the present. Of special interest are the biographies of eminent Princetonians, including the University's presidents, well-known trustees, distinguished deans, famous alumni, and some of Princeton's most prominent and popular professors. Other articles in the book embrace a wide range of topics: histories of academic departments, programs, and research units; descriptions of the honor system, the preceptorial method, the four-course plan, and coeducation; a historical survey of the

University's acquisition of land and the development of its campus, together with articles on its principal buildings; pieces on student activities; accounts of alumni activities; articles on athletics; portraits of notable personalities; and commentaries on a host of lighter topics such as the cane spree, beer jackets, the Faculty Song, the proctors, and Veterans of Future Wars. Among the most important articles are one summarizing Woodrow Wilson's Sesquicentennial address, "Princeton in the Nation's Service," and a dozen others recording faculty and alumni achievements toward the goal encompassed by that phrase. Originally published in 1978. The Princeton Legacy Library uses the latest print-on-demand technology to again make available previously out-of-print books from the distinguished backlist of Princeton University Press. These editions preserve the original texts of these important books while presenting them in durable paperback and hardcover editions. The goal of the Princeton Legacy Library is to vastly increase access to the rich scholarly heritage found in the thousands of books published by Princeton University Press since its founding in 1905.

Polymer Blends and Mixtures - D.J. Walsh
2012-12-06

A couple of years ago a small group of people began discuss the possibility of running an advanced summer school in the area of polymer blends. There had been a number of recent advances in this field, and given the

considerable interest in these new polymeric materials, we thought such a meeting would be well received both by industry and academia. We wanted it to contain a wide range of background science and technology and also up to date recent advances in the field. It became clear as the discussion progressed that the experts in the field were scattered over the length and breadth of Europe and North America and thus the cost of bringing them together for a summer school would necessitate a high registration fee which would deter many of the research workers we wished to attract. The NATO Advanced Study Institute programme enables a subject to be covered in depth and by giving generous funds to cover lecturers' costs ensures that a wide spectrum of research workers can attend. We decided to apply to NATO and this book contains the results of our request. The ASI was funded under the 'Double-Jump' Programme which is not a new Olympic event but a way of supporting courses on subjects of direct industrial interest. The Institute was also backed by donations from several companies and approximately half those attending were from industrial organisations.

Me on the Map - Joan Sweeney 2018-09-18
Maps can show you where you are anywhere in the world! A beloved bestseller that helps children discover their place on the planet, now refreshed with new art from Qin Leng. Where are you? Where is your room? Where is your home? Where is your town? This playful introduction to maps shows children how easy it is to find where they live and how they fit in to the larger world. Filled with fun and adorable new illustrations by Qin Leng, this repackaged *Me on the Map* will show readers how easy it is to find the places they know and love with help from a map.

Developments and Advances in Defense and Security - Álvaro Rocha 2018-04-05

This book includes a selection of articles from The 2018 Multidisciplinary International Conference of Research Applied to Defense and Security (MICRADS'18), held in Salinas, Peninsula de Santa Elena, Ecuador, from April 18 to 20, 2018. MICRADS is an international forum for researchers and practitioners to present and discuss the most recent innovations, trends, results, experiences and concerns in the various areas of defense and security, together

with their technological development and applications. The main topics covered are: Information and Communication Technology in Education; Computer Vision in Military Applications; Engineering Analysis and Signal Processing; Cybersecurity and Cyberdefense; Maritime Security and Safety; Strategy, Geopolitics and Oceanopolitics; Defense planning; Leadership (e-leadership); Defense Economics; Defense Logistics; Health Informatics in Military Applications; Simulation in Military Applications; Computer Networks, Mobility and Pervasive Systems; Military Marketing; Military Physical Training; Assistive Devices and Wearable Technology; Naval and Military Engineering; Weapons and Combat Systems; Operational Oceanography. The book is aimed at all those dealing with defense and security issues, including practitioners, researchers and teachers as well as undergraduate, graduate, master's and doctorate students.

Microbial Metatranscriptomics Belowground - Manoj Nath 2021-06-02

The book emphasizes role of functional microbes in soil to improve fertility and plant health in agro-ecosystem. In this compendium main emphasis is on occurrence and distribution of microbial communities, In situ active microbial quorum in rhizosphere, metatranscriptomics for microflora- and fauna, and functional diversity in rhizosphere. The book also highlights the importance of PGPRs in rhizosphere, root endotrophic microbes, functional niche under biotic stress, functional niche under abiotic stress, functional root derived signals, as well as functional microbe derived signals. Approaches deployed in metatranscriptomics, and molecular Tools used in rhizosphere are also discussed in detail. The book presents content is useful for students, academicians, researchers working on soil rhizosphere and as a policy document on sustenance of agriculture.

The Atmosphere and the Sea in Motion - Bert Bolin 2012-04-01

Additional Contributors Are George W. Platzman, Henry Stommel, Carl Gustav Rossby, T. Gergeron, H. R. Byers And Many Others.

Teaching Primary Mathematics - George Booker 2015-05-20

The fifth edition of Teaching Primary

Mathematics has been significantly revised and updated for the current educational environment. The organisation of the book has been redesigned to reflect feedback from readers and the approach taken by the Australian Curriculum: Mathematics. Teaching Primary Mathematics provides teachers and students with a sound framework for the successful teaching of mathematics to primary students. It is suitable both as a core text for primary student teachers and as an indispensable reference for practicing primary teachers seeking to update their knowledge.

Computational Medicine - Zlatko Trajanoski
2012-09-19

Computational methodologies and modeling play a growing role for investigating mechanisms, and for the diagnosis and therapy of human diseases. This progress gave rise to computational medicine, an interdisciplinary field at the interface of computer science and medicine. The main focus of computational medicine lies in the development of data analysis methods and mathematical modeling as well as computational simulation techniques specifically addressing medical problems. In this book, we present a number of computational medicine topics at several scales: from molecules to cells, organs, and organisms. At the molecular level, tools for the analysis of genome variations as well as cloud computing resources for medical genetics are reviewed. Then, an analysis of gene expression data and the application to the characterization of microbial communities are highlighted. At the protein level, two types of analyses for mass spectrometry data are reviewed: labeled quantitative proteomics and lipidomics, followed by protein sequence analysis and a 3D structure and drug design chapter. Finally, three chapters on clinical applications focus on the integration of biomolecular and clinical data for cancer research, biomarker discovery, and network-based methods for computational diagnostics.

A German and English Dictionary ... - George J. Adler 1902

Mindset Mathematics - Jo Boaler 2017-08-28

Engage students in mathematics using growth mindset techniques The most challenging parts of teaching mathematics are engaging students

and helping them understand the connections between mathematics concepts. In this volume, you'll find a collection of low floor, high ceiling tasks that will help you do just that, by looking at the big ideas at the first-grade level through visualization, play, and investigation. During their work with tens of thousands of teachers, authors Jo Boaler, Jen Munson, and Cathy Williams heard the same message—that they want to incorporate more brain science into their math instruction, but they need guidance in the techniques that work best to get across the concepts they needed to teach. So the authors designed Mindset Mathematics around the principle of active student engagement, with tasks that reflect the latest brain science on learning. Open, creative, and visual math tasks have been shown to improve student test scores, and more importantly change their relationship with mathematics and start believing in their own potential. The tasks in Mindset Mathematics reflect the lessons from brain science that: There is no such thing as a math person - anyone can learn mathematics to high levels. Mistakes, struggle and challenge are the most important times for brain growth. Speed is unimportant in mathematics. Mathematics is a visual and beautiful subject, and our brains want to think visually about mathematics. With engaging questions, open-ended tasks, and four-color visuals that will help kids get excited about mathematics, Mindset Mathematics is organized around nine big ideas which emphasize the connections within the Common Core State Standards (CCSS) and can be used with any current curriculum.

Dynamic-Clamp - Alain Destexhe 2009-03-11
Dynamic-clamp is a fascinating electrophysiology technique that consists of merging living neurons with computational models. The dynamic-clamp (also called “conductance injection”) allows experimentalists and theoreticians to challenge neurons (or any other type of cell) with complex conductance stimuli generated by a computer. The technique can be implemented from neural simulation environments and a variety of custom-made or commercial systems. The real-time interaction between the computer and cell also enables the design of recording paradigms with unprecedented accuracy via a computational

model of the electrode. *Dynamic-Clamp: From Principles to Applications* contains contributions from leading researchers in the field, who investigate these paradigms at the cellular or network level, in vivo and in vitro, and in different brain regions and cardiac cells. Topics discussed include the addition of artificially-generated synaptic activity to neurons; adding, amplifying or neutralizing voltage-dependent conductances; creating hybrid networks with real and artificial cells; attaching simulated dendritic tree structures to the living cell; and connecting different neurons. This book will be of interest to experimental biophysicists, neurophysiologists, and cardiac physiologists, as well as theoreticians, engineers, and computational neuroscientists. Graduate and undergraduate students will also find up-to-date coverage of physiological problems and how they are investigated.

Polyurethanes - Mark F. Sonnenschein
2020-12-29

This book, cohesively written by an expert author with supreme breadth and depth of perspective on polyurethanes, provides a comprehensive overview of all aspects of the science and technology on one of the most commonly produced plastics. Covers the applications, manufacture, and markets for polyurethanes, and discusses analytical methods, reaction mechanisms, morphology, and synthetic routes Provides an up-to-date view of the current markets and trend analysis based on patent activity and updates chapters to include new research Includes two new chapters on PU recycling and PU hybrids, covering the opportunities and challenges in both

Polymer Characterisation - B.J. Hunt
2012-12-06

Polymers continue to play an ever increasing role in the modern world. In fact it is quite inconceivable to most people that we could ever have existed of the increased volume and variety of materials without them. As a result currently available, and the diversity of their application, characterisation has become an essential requirement of industrial and academic laboratories involved with polymeric materials. On the one hand requirements may come from polymer specialists involved in the design and synthesis of new materials who require a

detailed understanding of the relationship between the precise molecular architecture and the properties of the polymer in order to improve its capabilities and range of applications. On the other hand, many analysts who are not polymer specialists are faced with the problems of analysing and testing a wide range of polymeric materials for quality control or material specification purposes. We hope this book will be a useful reference for all scientists and techno or industrial laboratories, logists involved with polymers, whether in academic and irrespective of their scientific discipline. We have attempted to include in one volume all of the most important techniques. Obviously it is not possible to do this in any great depth but we have encouraged the use of specific examples to illustrate the range of possibilities. In addition numerous references are given to more detailed texts on specific subjects, to direct the reader where appropriate. The book is divided into II chapters.

Merriam-Webster's Rhyming Dictionary -
Merriam-Webster, Inc 2002

"New! An easy-to-use, alphabetical guide for creating rhymes. Features 55,000 headwords with pronunciations at every entry. Lists arranged alphabetically and by number of syllables, with thousands of cross-references to guide readers to correct entries."

Open-Ended Maths Activities - Peter Sullivan
2004

Open-ended Maths Activities Second Edition is the revised and expanded edition of the best-selling title by Peter Sullivan and Pat Lilburn. It discusses a type of open-ended, problem-solving question called a 'good' question. These questions enhance learning, teaching and assessment and are a useful addition to a teacher's strategies. It includes: practical advice on how to create your own 'good' questions to use within the classroom organised by subject area and levels (upper, middle and junior) the sixteen topics covered are included within Number, Measurement, Space and Chance and Data.

The World of Nano-Biomechanics - Atsushi Ikai
2016-11-18

The World of Nano-Biomechanics, Second Edition, focuses on the remarkable progress in the application of force spectroscopy to

molecular and cellular biology that has occurred since the book's first edition in 2008. The initial excitement of seeing and touching a single molecule of protein/DNA is now culminating in the development of various ways to manipulate molecules and cells almost at our fingertips, enabling live cell operations. Topics include the development of molecular biosensors, mechanical diagnosis, cellular-level wound healing, and a look into the advances that have been made in our understanding of the significance of mechanical rigidity/flexibility of protein/DNA structure for the manifestation of biological activities. The book begins with a summary of the results of basic mechanics to help readers who are unfamiliar with engineering mechanics. Then, representative results obtained on biological macromolecules and structures, such as proteins, DNA, RNA, polysaccharides, lipid membranes, subcellular organelles, and live cells are discussed. New to this second edition are recent developments in three important applications, i.e., advanced AFM-data analysis, high-resolution mechanical biosensing, and the use of cell mechanics for medical diagnosis. Explains the basic physical concepts and mathematics of elementary mechanics needed to understand and perform experimental work on small-scale biological samples Presents recent developments of force-based biosensing Includes novel applications of nano-biomechanics to the medical field

Dimensions - 1946

Hemodiafiltration - Claudio Ronco 2007-01-01
A concise handbook on clinical and technical possibilities The application of hemodiafiltration has been restricted until recently, when a broader clinical application has been made possible due to evidence from large studies and clinical investigations. This book provides an updated review of the evolution, advances and recent results achieved by hemodiafiltration in the clinical arena. The first part is devoted to historical notes and an outline of the evolution of different forms of hemodiafiltration, made possible by technological developments in the fields of membranes, machines and fluids. The next section describes the theoretical rationale for hemodiafiltration, providing a detailed analysis of the involved mass separation

processes, the hydraulic properties of the dialyzers, fluid mechanics and crossfiltration in hollow fiber hemodialyzers. An outline of different hemodiafiltration techniques, also reporting peculiar transport mechanisms and related technology, is given next, and a section on the clinical effects of hemodiafiltration concludes this book. Including different technologies, the publication offers a complete overview of the technical and clinical possibilities provided by hemodiafiltration in its widest concept, ranging from the molecular basis to the most practical application. It will be a valuable tool for the implementation of hemodiafiltration in daily practice aimed at beginners and experts, scientists and physicians, students and senior faculty members alike.

Modern Physical Organic Chemistry - Eric V. Anslyn 2006

In addition to covering thoroughly the core areas of physical organic chemistry - structure and mechanism - this book will escort the practitioner of organic chemistry into a field that has been thoroughly updated.

On Heroes, Hero-worship and the Heroic in History - Thomas Carlyle 1840

Systemic Lupus Erythematosus - Josef S. Smolen 2012-12-06

More than 140 years ago, lupus erythematosus (LE) was recognized as a disease entity by clinicians working in the field of dermatology, which had only recently become an independent medical discipline. Soon after cutaneous lupus was first reported, it was realized that, apart from the skin, the disease could involve other organs and thus be systemic in nature. The latter observations were first made by MORITZ KAPOSI [1], whose work has attracted renewed attention recently and who succeeded FERDINAND VON HEBRA to the chair of dermatology at the Medical Faculty in Vienna. The early description of lupus erythematosus in both its cutaneous and systemic manifestations was thus intimately associated with Vienna and its Medical School. The next phase in the study of lupus was characterized by an increase in knowledge of the type and extent of organ involvement. The work by OSLER [2], LIBMANN and SACKS [3], and KLEMPERER [4] best represents these advances. The increase in

clinical knowledge of LE finally led to DUBOIS' famous monograph [5], which was published at a time of renewed interest in SLE, elicited by the description by HARGRAVES et al. [6] of the LE-cell phenomenon. A more detailed analysis of this finding revealed that the disease was characterized by an abnormal immune response, although its pathogenetic implications were still unclear.

The Destiny of the Soul: a Critical History of the Doctrine of a Future Life - William Rounseville Alger 1878

Targeting of Drugs - Gregory Gregoriadis
2012-12-06

Successful drug use in biology and medicine is often prejudiced by the failure of drugs that are otherwise active in vitro to act as efficiently in vivo. This is because in the living animal drugs must, as a rule, bypass or traverse organs, membranes, cells and molecules that stand between the site of administration and the site of action. In practice, however, drugs can be toxic to normal tissues, have limited or no access to the target and be prematurely excreted or inactivated. There is now growing optimism that such problems may be resolved by the use of carrier systems that will not only protect the non-target environment from the drugs they carry but also deliver them to where they are needed or facilitate their release there. Carrier systems presently under investigation include antibodies, glycoproteins, cells, reconstituted viruses and liposomes. Recent advances in the chemistry of cell receptor and receptor-recognising molecules, immunology, and natural and artificial membranes have revealed a multitude of ways in which such carrier systems can be modified or improved upon.

Measuring Metabolic Rates - John R. B. Lighton 2018-12-24

This is the only authoritative textbook on metabolic measurement of animals, ranging in mass from fruit flies to whales. It integrates a rigorous theoretical background with detailed practical guidelines for making actual measurements in the field and laboratory.

American Aberdeen-Angus Herd Book - American Angus Association 1918

Cassell's Family Magazine - 1879

Sol-Gel Processing and Applications - Y.A. Attia 2012-12-06

During my professional career, I developed a strong interest in sol-gel technology, and worked on both xerogel and aerogel systems. My fascination with aerogels has driven me to explore their commercial potential, which is currently an important component of my company's business plan. Together with my co-workers, I have also worked on the preparation of controlled PZT and silica xerogels as well as thin film coatings of metals by the sol-gel technology. These experiences convinced me of the tremendous potentials of this technology. A conviction that is shared by many scientists, engineers, and business leaders around the globe. Many sol-gel derived products are already articles of commerce. However, to expand the commercial potential of sol-gel technology, two challenges must be met: (1) the quality of sol-gel derived products must continue to meet or exceed the quality of competing products, (2) the production cost of sol-gel products (specially aerogels) must continue to decline. A key to lowering the costs of sol-gel products is finding inexpensive precursors.

Manufacturing Yogurt and Fermented Milks - Ramesh C. Chandan 2008-02-28

Melding the hands-on experience of producing yogurt and fermented milks over four decades with the latest in scientific research in the dairy industry, editor Chandan and his associate editors have assembled experts worldwide to write *Manufacturing Yogurt and Fermented Milks*. This one-of-a-kind resource gives a complete description of the manufacturing stages of yogurt and fermented milks from the receipt of raw materials to the packaging of the products. Information is conveniently grouped under four categories: · Basic background—History and consumption trends, milk composition characteristics, dairy processing principles, regulatory requirements, laboratory analysis, starter cultures, packaging, and more · Yogurt manufacture—Fruit preparations and flavoring materials, ingredients, processing principles, manufacture of various yogurt types, plant cleaning and sanitizing, quality assurance, and sensory analysis · Manufacture of fermented milks—Procedure, packaging and other details

for more than ten different types of products · Health benefits—Functional foods, probiotics, disease prevention, and the health attributes of yogurt and fermented milks All manufacturing processes are supported by sound scientific, technological, and engineering principles. Manufacturing Yogurt and Fermented Milks is designed for professionals in the dairy and food industry as well as for upper level undergraduate and graduate students majoring in Food Science, Dairy Technology and related fields. Industry professionals, professors, and students engaged in research in dairy/ food science will find the book's contemporary information and experience-based applications invaluable.

Analysis and Performance of Fiber Composites - Bhagwan D. Agarwal 1990-10-08

Having fully established themselves as workable engineering materials, composite materials are now increasingly commonplace around the world. Serves as both a text and reference guide to the behavior of composite materials in different engineering applications. Revised for this Second Edition, the text includes a general discussion of composites as material, practical aspects of design and performance, and further analysis that will be helpful to those engaged in research on composites. Each chapter closes with references for further reading and a set of problems that will be useful in developing a better understanding of the subject.

On Heroes, Hero-worship, and the Heroic in History - Thomas Carlyle 1852

Frontiers in Chemical Engineering - National Research Council 1988-02-01

In the next 10 to 15 years, chemical engineers have the potential to affect every aspect of American life and promote the scientific and industrial leadership of the United States. Frontiers in Chemical Engineering explores the opportunities available and gives a blueprint for turning a multitude of promising visions into realities. It also examines the likely changes in how chemical engineers will be educated and take their place in the profession, and presents new research opportunities.

Modeling of Thermo-Electro-Mechanical Manufacturing Processes - C. V. Nielsen 2012-10-08

Modeling of Thermo-Electro-Mechanical Manufacturing Processes with Applications in Metal Forming and Resistance Welding provides readers with a basic understanding of the fundamental ingredients in plasticity, heat transfer and electricity that are necessary to develop and properly utilize computer programs based on the finite element flow formulation. Computer implementation of a wide range of theoretical and numerical subjects related to mesh generation, contact algorithms, elasticity, anisotropic constitutive equations, solution procedures and parallelization of equation solvers is comprehensively described. Illustrated and enriched with selected examples obtained from industrial applications, Modeling of Thermo-Electro-Mechanical Manufacturing Processes with Applications in Metal Forming and Resistance Welding works to diminish the gap between the developers of finite element computer programs and the professional engineers with expertise in industrial joining technologies by metal forming and resistance welding.

The Two Reformations - Heiko A. Oberman 2008-10-01

In this last collection of his vital, controversial, and accessible writings, Heiko A. Oberman seeks to liberate and broaden our understanding of the European Reformation, from its origins in medieval philosophy and theology through the Puritan settlers who brought Calvin's vision to the New World. Ranging over many topics, Oberman finds fascinating connections between aspects of the Reformation and twentieth-century history and thought—most notably the connection to Nazism and the Holocaust. He revisits his earlier work on the history of anti-Semitism, rejects the notion of an unbroken line from Luther to Hitler to the Holocaust, and offers a new perspective on the Christian legacy of anti-Semitism and its murderous result in the twentieth century. Oberman demonstrates how the simplifications and rigidities of modern historiography have obscured the existential spirits of such great figures as Luther and Calvin. He explores the debt of both Luther and Calvin to medieval religious thought and the impact of diverse features of “the long fifteenth century”—including the Black Death, nominalism, humanism, and the Conciliar

Movement—on the Reformation.

Synthesis, Structure and Properties of Poly(lactic acid) - Maria Laura Di Lorenzo
2017-10-20

The series *Advances in Polymer Science* presents critical reviews of the present and future trends in polymer and biopolymer science. It covers all areas of research in polymer and biopolymer science including chemistry, physical chemistry, physics, material science. The thematic volumes are addressed to scientists, whether at universities or in industry, who wish to keep abreast of the important advances in the covered topics. *Advances in Polymer Science* enjoys a longstanding tradition and good reputation in its community. Each volume is dedicated to a current topic, and each review critically surveys one aspect of that topic, to place it within the context of the volume. The volumes typically summarize the significant developments of the last 5 to 10 years and discuss them critically, presenting selected examples, explaining and illustrating the important principles, and bringing together many important references of primary literature. On that basis, future research directions in the area can be discussed. *Advances in Polymer Science* volumes thus are important references for every polymer scientist, as well as for other scientists interested in polymer science - as an introduction to a neighboring field, or as a compilation of detailed information for the specialist. Review articles for the individual volumes are invited by the volume editors. Single contributions can be specially commissioned. Readership: Polymer scientists, or scientists in related fields interested in polymer and biopolymer science, at universities or in industry, graduate students

Technical News Bulletin - United States.
National Bureau of Standards 1947

Technical News Bulletin of the National Bureau of Standards - United States. National Bureau of Standards 1947

Supercritical Fluids - E. Kiran 2012-12-06
Supercritical fluids are neither gas nor liquid, but can be compressed gradually from low to high density and they are therefore interesting and important as tunable solvents and reaction

media in the chemical process industry. By adjusting the density the properties of these fluids can be customised and manipulated for a given process - physical or chemical transformation. Separation and processing using supercritical solvents such as CO₂ are currently on-line commercially in the food, essential oils and polymer industries. Many agencies and industries are considering the use of supercritical water for waste remediation. Supercritical fluid chromatography represents another, major analytical application. Significant advances have recently been made in materials processing, ranging from particle formation to the creation of porous materials. The chapters in this book provide tutorial accounts of topical areas centred around: (1) phase equilibria, thermodynamics and equations of state; (2) critical behaviour, crossover effects; (3) transport and interfacial properties; (4) molecular modelling, computer simulation; (5) reactions, spectroscopy; (6) phase separation kinetics; (7) extractions; (8) applications to polymers, pharmaceuticals, natural materials and chromatography; (9) process scale-up.

Brain and Culture - Bruce E. Wexler 2008-08-29
Research shows that between birth and early adulthood the brain requires sensory stimulation to develop physically. The nature of the stimulation shapes the connections among neurons that create the neuronal networks necessary for thought and behavior. By changing the cultural environment, each generation shapes the brains of the next. By early adulthood, the neuroplasticity of the brain is greatly reduced, and this leads to a fundamental shift in the relationship between the individual and the environment: during the first part of life, the brain and mind shape themselves to the major recurring features of their environment; by early adulthood, the individual attempts to make the environment conform to the established internal structures of the brain and mind. In *Brain and Culture*, Bruce Wexler explores the social implications of the close and changing neurobiological relationship between the individual and the environment, with particular attention to the difficulties individuals face in adulthood when the environment changes beyond their ability to maintain the fit between existing internal structure and external

reality. These difficulties are evident in bereavement, the meeting of different cultures, the experience of immigrants (in which children of immigrant families are more successful than their parents at the necessary internal transformations), and the phenomenon of interethnic violence. Integrating recent neurobiological research with major experimental findings in cognitive and developmental psychology—with illuminating references to psychoanalysis, literature, anthropology, history, and politics—Wexler presents a wealth of detail to support his arguments. The groundbreaking connections he makes allow for reconceptualization of the effect of cultural change on the brain and provide a new biological base from which to consider such social issues as "culture wars" and ethnic violence.

Technologies for economic and functional lightweight design - Klaus Dröder 2021-03-10

This book comprises the proceedings of the conference "Future Production of Hybrid Structures 2020", which took place in Wolfsburg. The conference focused on hybrid lightweight design, which is characterized by the combination of different materials with the aim

of improving properties and reducing weight. In particular, production technologies for hybrid lightweight design were discussed, new evaluation methods for the ecological assessment of hybrid components were presented and future-oriented approaches motivated by nature for the development of components, assemblies and systems were introduced. Lightweight design is a key technology for the development of sustainable and resource-efficient mobility concepts. Vehicle manufacturers operate in an area of conflict between customer requirements, competition and legislation. Material hybrid structures, which combine the advantages of different materials, have a high potential for reducing weight, while simultaneously expanding component functionality. The future, efficient use of function-integrated hybrid structures in vehicle design requires innovations and constant developments in vehicle and production technology. There is a great demand, especially with regard to new methods and technologies, for "affordable" lightweight construction in large-scale production, taking into account the increasing requirements with regard to variant diversity, safety and quality.