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The End of Poverty Jeffrey Sachs 2005 An international economic advisor shares a wide-spectrum theory about how to enable economic success throughout the world, posing solutions to top political, environmental, and social problems that contribute to poverty.

Computer-controlled Systems Karl Johan Åström 1997 This book provides a balanced survey of theory and practical aspects of computer-controlled systems. Design methods and practical aspects of computer controlled systems are presented. Interactive use of MATLAB and Simulink macros to understand the theory. Presents extensive pedagogical aids, such as worked examples, MATLAB macros, solutions manual, and problems to facilitate understanding.

Robot Analysis and Control H. Asada 1991-01-16 Introduces the basic concepts of robot manipulation--the fundamental kinematic and dynamic analysis of manipulator arms, and the key techniques for trajectory control and compliant motion control. Material is supported with abundant examples adapted from successful industrial practice or advanced research topics. Includes carefully devised conceptual diagrams, discussion of current research topics with references to the latest publications, and end-of-book problem sets. Appendixes. Bibliography.

Statics and Strength of Materials for Architecture and Building Construction Barry Onouye 2011 Statics and Strength of Materials for Architecture and Building Construction, Fourth Edition, offers students an accessible, visually oriented introduction to structural theory that doesn't rely on calculus. Instead, illustrations and examples of building frameworks and components enable students to better visualize the connection between theoretical concepts and the experiential nature of real buildings and materials. This new edition includes fully worked examples in each chapter, a companion website with extra practice problems, and expanded treatment of load tracing.

Nonlinear Dynamics of Surface-Tension-Driven Instabilities P. Colinet (Pierre.) 2001-08-15 This book provides the reader with a progressive and complete insight into a vast field of nonlinear physics. While the introductory first chapter describes nonlinear dissipative structures at a general level in fluid mechanics as well as in other fields, the second chapter contains a summary of the derivation of basic equations, with emphasis on boundary conditions prevailing at interfaces. Chapter 3 is devoted to linear stability analyses and identification of basic instability modes. The weakly nonlinear theories are presented in Chapter 4 (monotonic instabilities), Chapter 5 (oscillatory instabilities) and Chapter 6 (multiple bifurcations). Finally, results on strongly nonlinear surface-tension-driven convection and transitions to interfacial turbulence are contained in Chapter 7.

The Classical Stefan Problem S. C. Gupta (Ph. D., D. Sc.) 2003 For example, the description of some phase-field models in Chapter 4 arose out of this need for a smooth transition between topics. In the mathematical formulation of Stefan problems, the curvature effects and the kinetic condition are incorporated with the help of the modified Gibbs-Thomson relation. On the basis of some thermodynamical and metallurgical considerations, the modified Gibbs-Thomson relation can be derived, as has been done in the text, but the rigorous mathematical justification comes from the fact that this relation can be obtained by taking appropriate limits of phase-field models. Because of the unacceptability of some phase-field models due their so-called thermodynamical inconsistency, some consistent models have also been described. This completes the discussion of phase-field models in the present context.-

Surface-Enhanced Vibrational Spectroscopy Ricardo Aroca 2006-05-15 Surface Enhanced Vibrational Spectroscopy (SEVS) has reached maturity as an analytical technique, but until now there has been no single work that describes the theory and experiments of SEVS. This book combines the two important techniques of surface-enhanced Raman scattering (SERS) and surface-enhanced infrared (SEIR) into one text that serves as the definitive resource on SEVS. * Discusses both the theory and the applications of SEVS and provides an up-to-date study of the state of the art * Offers interpretations of SEVS spectra for practicing analysts * Discusses interpretation of SEVS spectra, which can often be very different to the non-enhanced spectrum - aids the practicing analyst

Physics and Applications of the Josephson Effect Antonio Barone 1982-05-14 Cover -- Contents -- CHAPTER 1 Weak Superconductivity 8212; Phenomenological Aspects -- 146;1 Macroscopic Quantum System -- 146;2 Coupled Superconductors -- 146;3 Single Electron Tunneling -- 146;4 Josephson Equations -- 146;5 Magnetic Field Effects -- 146;6 Barrier Free Energy -- 146;7 Electrodynamics of the Josephson Junction -- 146;8 Other

Josephson Structures -- CHAPTER 2 Microscopic Theory -- 1 Tunneling Hamiltonian Formalism -- 2 General Expression for the Total Current -- 3 Tunneling Current for Constant Voltage -- 4 Expressions of I_{qpi44} ; I_{q44} ; I_{J144} ; I_{J2} -- 5 Tunneling Current in the $B46$; $C46$; $S46$; Approximation -- 6 The 34 ; $\cos w34$; Problem -- CHAPTER 3 Magnitude and Temperature Dependence of the Critical Current -- 346;1 Josephson Current for $V61$;0 -- 346;2 $B46$; $C46$; $S46$; Approximation -- 346;3 Strong Coupling Effects -- 346;4 Effects of Paramagnetic Impurities -- 346;5 Measurement Techniques -- CHAPTER 4 34; Small34; Junctions in a Magnetic Field -- 446;1 Josephson Penetration Depth -- 446;2 Small Junctions -- 446;3 Uniform Tunneling Current Distribution -- 446;4 Nonuniform Tunneling Current Density -- CHAPTER 5 Large Junctions8212; Static Self45; Field Effects -- 546;1 Approximate Analysis -- 546;2 Analysis of Owen and Scalapino -- 546;3 Effects of the Junction Geometrical Configuration -- CHAPTER 6 Voltage Current Characteristics -- 646;1 $V45$; I Curves of Various Weak Links -- 646;2 Resistively Shunted Junction Model58; Autonomous Case -- 646;3 Current Biased Tunneling Junction -- 646;4 Effects of Thermal Fluctuations -- CHAPTER 7 Other Superconducting Weak Link Structures -- 746;1 Metal Barrier Junctions -- 746;2 Semiconducting Barrier Junctions -- 746;3 Bridge45; Type Junctions -- 746;4 Point Contact Weak Links -- CHAPTER 8 Device Fabrication Technology -- 846;1 Josephson Tunneling Junctions -- 846;2 Junction Electrodes -- 846;3 Oxide Barriers -- 846;4 Junction Patterning -- 846;5 Simple Procedures for Preparing Oxide Barrier Junctions -- 846;6 Semiconductor Barriers -- 846;7 Bridge45; Type Weak Links -- 846;8 Point Contact Structures -- CHAPTER 9 Resonant Modes In Tunneling Structures -- 946;1 Josephson Junction as a Transmission Line -- 946;2 Resonant Modes for Low Q Junctions -- 946;3 Junction of Infinite Length -- 946;4 Nonuniform Current Density Distribution -- CHAPTER 10 Fluxon Dynamics -- 1046;1 The Sine Gordon Equation -- 1046;2 Nonlinear Standing Waves on a Rectangular Junction -- 1046;3 Effects of Losses and Bias -- 1046;4 Zero Field Steps -- 1046;5 Perturbative Analysis of Fluxon Dynamics -- 1046;6 Effects of Flux Flow on $D46$; $C46$; Voltage45; Current Characteristics -- 1046;7 Two Dimensional Junctions -- CHAPTER 11 High Frequency Properties and Applications of the Josephson Effect -- 1146;1 Simple Voltage Source Model -- 1146;2 Tunneling Junctions in External Microwave Radiation -- 1146;3 Current Source Model -- 1146;4 Emission of Radiation -- 1146;5 Detection of Radiation -- 1146;6 Parametric Amplification -- 1146;7 The Determina.

Catalogues and Indexes of British Government Publications, 1920-1970: Annual catalogues of British government publications, 1920-1935 Great Britain. Her Majesty's Stationery Office 1974

Strategisch merkenmanagement Kevin Lane Keller 2010 Studieboek op hbo-niveau.

Tibetan Refugees in India Rajesh S. Kharat 2003 It Is A Well Known Fact That The Problem Of Tibetan Refugees Is A Living Problem And It Is Bound To Remain So For Many Years To Come. In Fact It Is Very Much True That Despite Constant Protests Made By Communist China On The Issue Of Tibetan Refugees, The Government Of India Remains In A State Of Readiness To Tackle The Problem On A Scale And In A Manner Which The Magnitude And Intensity Of The Problem Demand. The Grant Of Asylum To Political And Religious Refugees Has Been The Tradition Of Every Civilized Community... Respiration Is Not The Ultimate, Real Solution Of The Problem Of Tibetan Refugees. On The Contrary, The Immediate Problems And Important Questions Of These Refugees Are The Three Basic Needs Of Livelihood, Food, Clothing And Shelter. Besides This, Medical Aid, Education, Employment, Settlement And Finally Absorption Come To The Forefront. These Questions Are Not Temporary Or Time Being Concerns At Least In The Case Of Tibetan Refugees. So, One Has To Foresee The Long-Term Time Solutions In Terms Of Future Generation Of Tibetan Refugees. This Is How The Situation Of Tibetan Refugees In India Provoked The Author To Undertake This Study Which Makes An Attempt To Find Out The Action/Reaction Of The Local People Vis-A-Vis Tibetans In And Around The Settlement Camps. Contents Chapter 1: An Introduction To The Term Refugee; Chapter 2: Historical Background Of Tibetan Refugees; Chapter 3: Survival In Exile; Chapter 4: Reconstruction Of Tibet In Exile; Chapter 5: Implications On India As A Host Nation.

Design for Creep R.K. Penny 1995-07-31 Our rationale for the second edition remains the same as for the first edition, which appeared over twenty years ago. This is to offer simplified, useful and easily understood methods for dealing with the creep of components operating under conditions met in practice. When the first edition was written, we could not claim that the methods which were introduced were well-ried. They were somewhat conjectural, although firmly based, but not sufficiently well devel oped. Since that time, the Reference Stress Methods (RSM) introduced in the book have received much scrutiny and development. The best recognition we could have of the original methods is the fact that they are now firmly embedded in codes of practice. Hopefully, we have now gone a long way towards achieving our original objectives. There are major additions to this second edition which should help to justify our claims. These include further clarification regarding Reference Stress Methods in Chapter 4. There are also new topics which depend on RSM in varying degrees: • Creep fracture is covered in Chapter 7, where methods for assessing creep crack initiation and crack growth are fully described. This chapter starts with a review of the basic concepts of fracture mechanics and follows with useful, approximate methods, compatible with the needs of design for creep and the availability of standard data. • Creep/fatigue interactions and environmental effects appear in Chapter 8.

Applied Complexometry Rudolf Přebil 1982 Applied Complexometry tackles complexometry from a practical perspective. The book discusses more applications, and theories are reduced to the most important ones. Comprised of 22 chapters, this book deals first with volumetric reagents in complexometry, and then tackles detection of the titration end-point. Chapter 3 covers masking (screening) reagents. Chapter 4 discusses separation methods, and Chapter 5 covers apparatus and solutions. Chapter 6 talks about the classification of EDTA complexes, while Chapter 7 discusses the complexometry anions. Chapter 8 discusses the analytical applicati ...

1984 George Orwell 2013-05-16 Nieuwspraak, Big Brother, het vocabulaire uit 1984 is in onze taal opgenomen en een eigen leven gaan leiden. De roman van George Orwell uit 1949 over de strijd van Winston Smith, ambtenaar op het ministerie van Waarheid, tegen de alles doordringende Partij, en zijn gedoemde liefde voor

Julia heeft niets van zijn literaire zeggingskracht verloren. In Orwells steeds weer herdrukte anti-utopie verkeert de wereld in de wurggreep van een systeem dat is gegrondvest op de verbreiding van angst, haat en wreedheid, en dat iedere vorm van persoonlijke vrijheid en individualiteit uitsluit. 1984 is onverminderd geldig als benauwend nauwkeurig blauwdruk van elk dictatoriaal regime.

The Conflict Resolution Syndrome Alexander Abdennur 1987 This is a study of conflict resolution as a personal adaption to the conflict inherent in any particular situation. The model distinguishes three basic reactions to conflict -- confrontation, reconciliation, and avoidance - determined by personality variables. The theory is tested on samples of correctional and social service volunteer workers, because volunteers tend to select freely the roles that are harmonious or consistent with their personalities. The study found that these volunteers preferred low-conflict situations and tended to deal with problems by denying their existence, or by underestimating their potential for division and conflict. This cluster of behaviours is defined as the Conflict Resolution Syndrome. The dangers of institutionalizing the Syndrome, and of concentrating 'avoidance' personalities in decision-making roles, is described : the solutions offered tend to respond to the psychological needs of the decision-makers rather than to the objective conditions of the problem. Chapter 1 contains an overview of the book. Chapter 2 contains a critical review of the literature on the personality characteristics of volunteers. The research study is presented in Chapter 3. In Chapter 4, a personality typology based on conflict avoidance is outlined. Chapter 5 gives social and political analyses of aspects of volunteerism, and Chapter 6 describes the social and political dangers inherent in conflict avoidance strategies.

Environmental Engineering Science William W. Nazaroff 2000-11-20 This book covers the fundamentals of environmental engineering and applications in water quality, air quality, and hazardous waste management. It begins by describing the fundamental principles that serve as the foundation of the entire field of environmental engineering. Readers are then systematically reintroduced to these fundamentals in a manner that is tailored to the needs of environmental engineers, and that is not too closely tied to any specific application.

De afstamming van den mensch, en de seksueele teeltkeus Charles Darwin 1872

Het Tweede machinetijdperk Erik Brynjolfsson 2014-10-08 Internationale bestseller over de impact van technologie op ons leven: Google Glasses, zelfrijdende auto's, computers die het menselijk brein vervangen... De digitalisering heeft ons leven drastisch veranderd, en we staan nog maar aan het begin van deze revolutie. 'Vanaf nu wordt de verandering pas echt duizelingwekkend', aldus Erik Brynjolfsson en Andrew McAfee, beiden verbonden aan het prestigieuze MIT. 'En het is aanpassen of verliezen.' Miljoenen mensen dreigen hun baan te verliezen, precare machtsevenwichten verschuiven en de sociale ongelijkheid groeit. Dit tweede tijdperk der machines kan echter ook zorgen voor meer welvaart. Maar dan moeten we nu de juiste keuzes maken.

Steel Structures: Behavior and LRFD Ramulu Vinnakota 2005-01-26 This textbook integrates both design considerations of steel structures as well as the behavior on which the design specifications are based. Steel Structures: Behavior and LRFD is unique in that it has five introductory chapters: an Introduction to motivate student interest by showing and discussing actual steel projects; Chapter 2 presents a discussion of steels as a structural material; Chapter 3 provides a broad introduction to structures; Chapter 4 discusses loads acting on structures per ASCE Standards 7; and Chapter 5 explains calculations for simple examples. The other unique feature is thorough coverage of connections. Connections are the most important and least understood components of steel structures. Chapters 6, 12, and 13 are devoted to this key topic. Throughout the text, a web icon references readers to the book's website (<http://www.mhhe.com/vinnakota>), which contains extensive additional coverage of advanced topics. Instructor resources available on the website include: comprehensive Solutions Manual as well as tips on how to best use the text in your course. Student resources include: comprehensive list of equations, detailed list of symbols, and flowcharts.

Functions of Matrices Nicholas J. Higham 2008-09-11 "This superb book is timely and is written with great attention paid to detail, particularly in its referencing of the literature. The book has a wonderful blend of theory and code (MATLAB®) so will be useful both to nonexperts and to experts in the field." — Alan Laub, Professor, University of California, Los Angeles The only book devoted exclusively to matrix functions, this research monograph gives a thorough treatment of the theory of matrix functions and numerical methods for computing them. The author's elegant presentation focuses on the equivalent definitions of $f(A)$ via the Jordan canonical form, polynomial interpolation, and the Cauchy integral formula, and features an emphasis on results of practical interest and an extensive collection of problems and solutions. Functions of Matrices: Theory and Computation is more than just a monograph on matrix functions; its wide-ranging content—including an overview of applications, historical references, and miscellaneous results, tricks, and techniques with an $f(A)$ connection—makes it useful as a general reference in numerical linear algebra. Other key features of the book include development of the theory of conditioning and properties of the Fréchet derivative; an emphasis on the Schur decomposition, the block Parlett recurrence, and judicious use of Padé approximants; the inclusion of new, unpublished research results and improved algorithms; a chapter devoted to the $f(A)b$ problem; and a MATLAB® toolbox providing implementations of the key algorithms. Audience: This book is for specialists in numerical analysis and applied linear algebra as well as anyone wishing to learn about the theory of matrix functions and state of the art methods for computing them. It can be used for a graduate-level course on functions of matrices and is a suitable reference for an advanced course on applied or numerical linear algebra. It is also particularly well suited for self-study. Contents: List of Figures; List of Tables; Preface; Chapter 1: Theory of Matrix Functions; Chapter 2: Applications; Chapter 3: Conditioning; Chapter 4: Techniques for General Functions; Chapter 5: Matrix Sign Function; Chapter 6: Matrix Square Root; Chapter 7: Matrix p th Root; Chapter 8: The Polar Decomposition; Chapter 9: Schur-Parlett Algorithm; Chapter 10: Matrix Exponential; Chapter 11: Matrix Logarithm; Chapter 12: Matrix Cosine and Sine; Chapter 13: Function of Matrix Times Vector: $f(A)b$; Chapter 14: Miscellany; Appendix A: Notation; Appendix B:

Background: Definitions and Useful Facts; Appendix C: Operation Counts; Appendix D: Matrix Function Toolbox; Appendix E: Solutions to Problems; Bibliography; Index.

Uitblinkers Malcolm Gladwell 2010-05-26 *Uitblinkers* is een stimulerende en verbazende zoektocht naar de herkomst van succes. Vanuit het niets bestaat niet. Wat is er zo bijzonder aan een uitzonderlijke prestatie? Dat lijkt een vreemde vraag, maar met vreemde vragen is Malcolm Gladwell op zijn best. *Uitblinkers* is een stimulerende en verbazende zoektocht naar de herkomst van succes. En die ligt niet, zoals meestal wordt gedacht, in een bijzonder brein of een verbluffend talent. *Uitblinkers* hebben iets bijzonders, maar dat zit hem vooral in wat ze meegemaakt hebben: hun cultuur, familie, en alle eigenaardigheden waarmee ze in aanraking zijn geweest. De geheimen van de softwaremiljardair, de briljante voetballer, de geniale wiskundige en The Beatles zijn niet onbegrijpelijk. In *Uitblinkers* laat Malcolm Gladwell zien waarom sommige mensen succes hebben, en anderen niet. Zijn beste en bruikbaarste boek: spannende wetenschap, zelfhulp en amusement in één! entertainment weekly Malcolm Gladwell is hij vaste medewerker bij The New Yorker. Daarvoor was hij wetenschapsjournalist bij de Washington Post. Van Het beslissende moment zijn wereldwijd meer dan twee miljoen exemplaren verkocht en Intuïtie stond twee jaar onafgebroken op de New York Times bestsellerlijst. Gladwell won de National Magazine Award en was in 2005 volgens Time een van de honderd invloedrijkste mensen.

The Art of Problem Posing Stephen I. Brown 1983 *The focus of this book is on a rationale and a set of strategies for problem generation in mathematics. Six chapters attempt to involve readers in the process of posing problems and in understanding why that process is important. Chapter 1 discusses two problem posing perspectives, while chapter 2 looks at the first phase of problem posing. The "what-if-not" problem posing strategy is presented in chapter 3, and depicted in action in chapter 4. Some natural links between problem posing and problem solving are discussed in chapter 5. Finally, conclusions are briefly presented. Each chapter contains illustrative problems as well as suggested questions or directions. In the appendix, a college course on problem posing is described, also with illustrative examples. Finally, a bibliography is provided. (MNS)*

Hoe wij beslissen Jonah Lehrer 2010-02-09 *De beste beslissingen ontstaan uit een goed afgestemde combinatie van verstand en gevoel. Hoe die mix er precies uitziet verschilt per situatie: voor een huis kiezen kan het best op je gevoel, omdat je de voors en tegens allang op een rijtje hebt gezet, maar aandelen kopen kan beter op ratio, want op de beurs laat je je vaak gevaarlijk meeslepen door emoties. Waar het om gaat is dat je weet wanneer je de verschillende delen van je hersenen moet gebruiken. Lehrer geeft ons de middelen die we hiervoor nodig hebben en maakt niet alleen gebruik van de allernieuwste onderzoeksresultaten, maar ook van de praktijkervaring van uiteenlopende besluitvormers, van piloten en investeerders tot pokeraars en seriemoordenaars. Hij beantwoordt twee vragen die voor iedereen van belang zijn, van ceo tot brandweerman: Hoe komen wij tot een besluit? En hoe kunnen we betere afwegingen maken? '*

Mac OS X Panther Hacks Rael Dornfest 2004 *Like the animal it's named for, Mac OS X Panther is beautiful, sleek, superbly efficient, dangerously alluring, and all muscle under the surface. Beneath its appealing interface, it's a hard-working machine. Those coming to Mac OS X from previous incarnations of the operating system recognize much of the friendly face of the Macintosh they're used to, but they're also plunged into a whole new world. Unix converts to Mac OS X find a familiar FreeBSD-like operating system at the core and many of the command-line applications that they're familiar with: it's like an open invitation to roll up their sleeves and hack. Mac OS X Panther Hacks brings together the perfect combination of tips, tricks, and tools to help serious Mac users--regardless of their background--get the most from their machines. This revised collection reflects the real-world know how of those well-steeped in Unix history and expertise, sharing their no-nonsense, sometimes quick-and-dirty solutions to administering and taking full advantage of everything a Unix desktop has to offer: Web, Mail, and FTP serving, security services, SSH, Perl and shell scripting, compiling, configuring, scheduling, networking, and hacking. Add to that the experience of die-hard Macintosh users, customizing and modifying their hardware and software to meet their needs. The end result is cool stuff no power user should be without. The hacks in the book range from the quick and easy to the more complex. Each can be read easily in a few minutes, saving countless hours of searching for the right answer. Mac OS X Panther Hacks provides direct, hands-on solutions in topics such as: User Interface Accessories (iPod, USB devices, mobile phones, PDAs, etc.) Wired and wireless networking (Ethernet, WiFi, Bluetooth, etc.) Email (servers and clients) Web (servers and clients) Messaging (iChat and associated apps) Printing and Faxing (sharing printers, fax server, etc.) Multimedia If you want more than your average Mac user--you want to explore and experiment, unearth shortcuts, create useful tools, and come up with fun things to try on your own--this book will set you on the right track. Written for users who need to go beyond what's covered in conventional manuals--Mac OS X Panther Hacks will bring your Mac to its full potential.*

Government Reports Annual Index 1978

Semiclassical Dynamics and Relaxation D.S.F. Crothers 2007-12-04 *Condensed-matter physics plays an ever increasing role in photonics, electronic and atomic collisions research. Dispersion (Dynamics and Relaxation) includes scattering/collisions in the gaseous phase. It also includes thermal agitation, tunneling and relaxation in the liquid and solid phases. Classical mechanics, classical statistical mechanics, classical relativity and quantum mechanics are all implicated. 'Semiclassical' essentially means that there is a large or asymptotic real parameter. 'Semiclassical' can also mean 'classical with first-order quantal correction', based on an exponentiated Liouville series commencing with a simple pole in the \hbar -plane, being Planck's reduced constant and coming with all the attendant connection problems associated with the singularity at the turning or transition point and with the Stokes phenomenon. Equally, 'semiclassical' can mean 'electrons described quantally and the heavy particles classically'. This latter gives rise to the so-called impact parameter method based on a pre-assigned classical trajectory. With evermore sophisticated experiments, it has become equally more important to test theory over a wider range of parameters. For instance, at low impact energies in heavy-particle collisions, the inverse velocity is a large parameter; in single-domain ferromagnetism, thermal*

agitation (including Brownian motion and continuous-time random walks) is faced with a barrier of height ' σ ', a possibly large parameter. Methods of solution include phase-integral analysis, integral transforms and change-of-dependent variable. We shall consider the Schrödinger time-independent and time-dependent equations, the Dirac equation, the Fokker Planck equation, the Langevin equation and the equations of Einstein's classical general relativity equations. There is an increasing tendency among physicists to decri applied mathematics and theoretical physics in favour of computational blackboxes. One may say applied mathematics concerns hard sums and products (and their inverses) but unless one can simplify and sum infinite series of products of infinite series, can one believe the results of a computer program? The era of the polymath has passed; this book proposal aims to show the relevance to, and impact of theory on, laboratory scientists.

Physics of Non-equilibrium Plasmas V. M. Lelevkin 1992 This book deals with the physics of low temperature plasmas of atomic and molecular gases. Several diagnostic methods for nonequilibrium plasma are described. The relevant elementary processes governing the kinetics and transport of atomic and chemically active molecular plasmas are discussed and numerical models of plasmas aimed at systematically solving MHD-equations are also presented. Intended for use by scientists and engineers active in various fields of low-temperature plasma physics, this book is also suitable for teachers and students at pre- and postgraduate level. In chapter 1 general problems of the elementary physics of plasma are considered and the principal ideas relating to plasma properties are given. In chapter 2 the principles which form the basis of atomic and molecular spectra radiated by a plasma are briefly described. Chapter 3 reviews experimental material associated with the peculiarities of molecular excitation processes in nonequilibrium low-temperature plasma. In chapter 4 a number of problems related to the technique and methods of spectroscopy are considered. Chapter 5 presents experimental material gained from studying the peculiarities of molecular excitation spectra from low-pressure gas discharges and describes diagnostics for nonequilibrium chemically active plasma. In chapter 6 the problems of mathematical modeling of equilibrium plasma in arcs, microwave and optical discharges are analyzed. In chapter 7, a theoretical description of nonequilibrium plasma in electrical arcs, microwave and radio-frequency discharges based on two-temperature approximation of the plasma parameters is offered. Chapter 8 presents a detailed case-study on the transport and excitation of a magnetized plasma of intermediate electron density. Several diagnostic techniques and models introduced in earlier chapters are used to obtain information on plasma properties.

Books in Print 1993

Inleiding informatica J. Glenn Brookshear 2005

Mechanics of Transformation Toughening and Related Topics B. L. Karihaloo 1996 Cover -- Contents -- Part I: Introduction and Theory -- Chapter 1. Introduction -- Chapter 2. Transformation Toughening Materials -- 2.1 General -- 2.2 Modern Zirconia-Based Ceramics -- 2.3 Martensitic Transformation -- 2.4 Fabrication and Microstructure of PSZ -- 2.5 Microstructural Development -- 2.6 Fabrication and Microstructure of TZP -- Chapter 3. Constitutive Modelling -- 3.1 Introduction -- 3.2 Constitutive Model for Dilatant Transformation Behaviour -- 3.3 Constitutive Model for Shear and Dilatant Transformation Behaviour -- 3.4 Constitutive Model for ZTC -- Chapter 4. Elastic Solutions for Isolated Transformable Spots -- 4.1 Centres of Transformation -- 4.2 Transformation Spots -- 4.3 Homogeneous Dilatant Inclusions -- Chapter 5. Interaction between Cracks and Isolated Transformable Particles -- 5.1 Interaction of a Spot with a Crack -- 5.2 Stress Intensity Factors -- 5.3 Mode-I Spot Distributions -- Chapter 6. Modelling of Cracks by Dislocations -- 6.1 Dislocation Formalism ... National Library Service Cumulative Book Review Index, 1905-1974: Authors. [A-Z National Library Service Corporation 1975

Forthcoming Books Rose Arny 1996

Biological Periodicity A. Lima-de-Faria 1995 Contents. Introduction. Acknowledgments. Part I Periodic Distribution of Properties in Chemical Elements and Minerals. Chapter 1. Periodicity in Chemical Elements. The Order in Chemical Elements Took Over 100 Years to Establish. The Periodicity of Properties. The Mechanism Underlying the Periodicity in the Chemical Elements. Graphic Display of Chemical Periodicity. Numerous Properties Exhibit Periodic Trends. Anomalies Already Exist at the Level of Chemical Periodicity. Chapter 2. Periodicity in Minerals. Mineral Classification in Based on Chemical Hierarchy. The Periodicity of the Elements Has Determined the Periodicity of Properties in Minerals. Structural and Functional Periodicity-Emergence of the Same Pattern and Proto-Function in Different Mineral Classes. Part II Periodic Distribution of Functions in Living Organisms. Chapter 3. Period Flight. The Preparation of the Graphs Revealing Biological Periodicity. Flight in Insects Arose from Nowhere. Flight Developed Independently at Five Different Times in Biological Evolution. Flight is Both a Structural and a Functional Process. Flight Demands Many More Structures and Functions than the Existence of a Wing. A Series of Similarities Between the Flight of Insects and that of Birds. Comparison Between the Flight of Bats and Birds. Comparison Between the Flight of Pterosaurs and Birds. The Emergence of Flight in Fish Does Not Appear to be Directly Related to the Environment. Flight in Fish. A Wing and a Fin Can be Made With or Without Bones. The Wing of an Insect and that of a Bird Turn Out to be Built by the Same Genes. Characteristics of Flight Periodicity. Chapter 4. Period Vision. Light-Sensitivity is an Integral Part of the Original Cell Construction. Plant Leaves are Mosaics of Microlenses. Comparison Between the Compound Eyes of Insects and the Light-Sensitive Cells of Leaves. Features of Periodicity in Vision. The Type of Eyes Present from the Protozoa to the Early Chordates. Comparison Between the Eyes of Humans and Cephalopods. Vision Within Insects Displays Periodicity. The Independent Evolution of the Eye Vision and Environment. The Insect Eye and the Human Eye are Produced by the Same Type of Genes. General Features of Vision Periodicity. Chapter 5. Period Placenta. Definition of Placenta. Placenta in Flowering Plants. The Placenta in Invertebrates. The Placenta is Present in Fish. The Placenta in Amphibians and Reptiles. The Placenta Does Not Exist or is Rudimentary in Marsupials. The Periodicity of the Placenta. Chapter 6. Period Bioluminescence. Luminescence in Minerals. Chemical Processes Involved in Bioluminescence. The Occurrence

of Bioluminescence. Characteristic Features of Bioluminescence. The Periodicity of Bioluminescence. Chapter 7. Period Penis. The Periodicity of the Occurrence of the Penis Similarities Between the Penis of Humans and Invertebrates. Water Performs with Equal Efficiency the Function of Bones and Other Supporting Tissues. The Emergence of the Penis is Not Directly Related to the General Environment or Organism Complexity. Chapter 8. Period Return to Aquatic Life. Water Changes the Configuration of Minerals and Macromolecules. The Plants that Live in Water have Streamlined Forms. The Plants Reveal that No Change in Genetic Constitution is Necessary to Produce a Novel Hydrodynamic Form and Function. Water-Air and Air-Water Transformations in Plants Experimental Demonstration that Water Decides the Leaf Pattern. The Transformations Involved in the Return to Water in Invertebrates are Similar to Those that Occur Later in Higher Mammals. The Conquest of the Land and the Return to Water in Amphibians. Structural and Functional Modifications in Reptiles Following the Transfer to Aquatic Life. The Hydrodynamic Forms and Functions of Birds Derive from Those of Land Relatives. The Return of Mammals to Aquatic Life Occured Several Times and from Different Orders. The Return of the Carnivores to Water: The Seals. The Sea Cows are Derived from the An

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Differential Dynamical Systems James D. Meiss 2007-01-01 Differential equations are the basis for models of any physical systems that exhibit smooth change. This book combines much of the material found in a traditional course on ordinary differential equations with an introduction to the more modern theory of dynamical systems. Applications of this theory to physics, biology, chemistry, and engineering are shown through examples in such areas as population modeling, fluid dynamics, electronics, and mechanics. Differential Dynamical Systems begins with coverage of linear systems, including matrix algebra; the focus then shifts to foundational material on nonlinear differential equations, making heavy use of the contraction-mapping theorem. Subsequent chapters deal specifically with dynamical systems concepts: flow, stability, invariant manifolds, the phase plane, bifurcation, chaos, and Hamiltonian dynamics. Throughout the book, the author includes exercises to help students develop an analytical and geometrical understanding of dynamics. Many of the exercises and examples are based on applications and some involve computation; an appendix offers simple codes written in Maple, Mathematica, and MATLAB software to give students practice with computation applied to dynamical systems problems. Audience This textbook is intended for senior undergraduates and first-year graduate students in pure and applied mathematics, engineering, and the physical sciences. Readers should be comfortable with elementary differential equations and linear algebra and should have had exposure to advanced calculus. Contents List of Figures; Preface; Acknowledgments; Chapter 1: Introduction; Chapter 2: Linear Systems; Chapter 3: Existence and Uniqueness; Chapter 4: Dynamical Systems; Chapter 5: Invariant Manifolds; Chapter 6: The Phase Plane; Chapter 7: Chaotic Dynamics; Chapter 8: Bifurcation Theory; Chapter 9: Hamiltonian Dynamics; Appendix: Mathematical Software; Bibliography; Index

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Writing Up Qualitative Research Harry F. Wolcott 2001-05-22 How do you select what to write up from all the qualitative data that has been collected? How can you best tell the story of your study? Harry F Wolcott has thoroughly revised the book that has provided a solution to these questions as well as inspired thousands of readers in writing up their qualitative research. Designed in a new format to make it easier to locate and review key ideas, the Second Edition has been completely updated and expanded to include features, such as: * chapter 4 on Linking Up: Provides readers with thoughtful guidelines as to how and where to use theory, how much needs to be said about method, and some thoughts about the 'traditional' literature review * applications: Give readers the opportunity to put into practice some of Wolcott's tips to improve or jump-start their own writing * bulleted reviews: Highlight the key points to remember from each chapter * subject and author indexes for easy reference Using lively examples and friendly tips gleaned from his own and other researchers' experiences, Wolcott offers readers suggestions for when and where to begin, how to keep the momentum going once writing is underway, suggestions for tightening things up, al

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Survival Analysis David G. Kleinbaum 2005 An excellent introduction for all those coming to the subject for the first time. New material has been added to the second edition and the original six chapters have been modified. The previous edition sold 9500 copies world wide since its release in 1996. Based on numerous courses given by the author to students and researchers in the health sciences and is written with such readers in mind. Provides a "user-friendly" layout and includes numerous illustrations and exercises. Written in such a way so as to enable readers learn directly without the assistance of a classroom instructor. Throughout, there is an emphasis on presenting each new topic backed by real examples of a survival analysis investigation, followed up with thorough analyses of real data sets.

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