

Hilbert Huang Transform And Its Applications 16 Interdisciplinary Mathematical Sciences Pdf

Recognizing the pretension ways to get this book **Hilbert Huang Transform And Its Applications 16 Interdisciplinary Mathematical Sciences pdf** is additionally useful. You have remained in right site to start getting this info. get the Hilbert Huang Transform And Its Applications 16 Interdisciplinary Mathematical Sciences pdf belong to that we pay for here and check out the link.

You could purchase lead Hilbert Huang Transform And Its Applications 16 Interdisciplinary Mathematical Sciences pdf or get it as soon as feasible. You could quickly download this Hilbert Huang Transform And Its Applications 16 Interdisciplinary Mathematical Sciences pdf after getting deal. So, bearing in mind you require the book swiftly, you can straight get it. Its suitably completely simple and appropriately fats, isnt it? You have to favor to in this appearance

Nanophotonics, Nanooptics, Nanobiotechnology, and Their Applications Sep 02 2019 This book highlights some of the latest advances in nanotechnology and nanomaterials from leading researchers in Ukraine, Europe, and beyond. It features contributions from participants in the 6th International Science and Practice Conference Nanotechnology and Nanomaterials (NANO2018) in Kiev, Ukraine on August 27-30, 2018 organized by the Institute of Physics of the National Academy of Sciences of Ukraine, University of Tartu (Estonia), University of Turin (Italy), and Pierre and Marie Curie University (France). Internationally recognized experts from a wide range of universities and research institutions share their knowledge and key results on nanooptics, energy storage and biomedical applications. This book's companion volume also addresses topics such as materials properties, behavior, and synthesis.
Nonlinear Functional Analysis and Its Applications May 23 2021

Recent Advances in Operator Theory and Its Applications May 11 2020 This book contains a selection of carefully refereed research papers, most of which were presented at the fourteenth International Workshop on Operator Theory and its Applications (IWOTA), held at Cagliari, Italy, from June 24-27, 2003. The papers, many of which have been written by leading experts in the field, concern a wide variety of topics in modern operator theory and applications, with emphasis on differential operators and numerical methods. The book will be of interest to a wide audience of pure and applied mathematicians and engineers.

Progress In Analysis And Its Applications - Proceedings Of The 7th International Isaac Congress Nov 16 2020 The International Society for Analysis, its Applications and Computation (ISAAC) has held its international congresses biennially since 1997. This proceedings volume reports on the progress in analysis, applications and computation in recent years as covered and discussed at the 7th ISAAC Congress. This volume includes papers on partial differential equations, function spaces, operator theory, integral transforms and equations, potential theory, complex analysis and generalizations, stochastic analysis, inverse problems, homogenization, continuum mechanics, mathematical biology and medicine. With over 500 participants from almost 60 countries attending the congress, the book comprises a broad selection of contributions in different topics.

The Chemical Gazette, Or, Journal of Practical Chemistry, in All Its Applications to Pharmacy, Arts, and Manufactures Sep 07 2022

Computer Science and its Applications Aug 26 2021 The 6th FTRA International Conference on Computer Science and its Applications (CSA-14) will be held in Guam, USA, Dec. 17 - 19, 2014. CSA-14 presents a comprehensive conference focused on the various aspects of advances in engineering systems in computer science, and applications, including ubiquitous computing, U-Health care system, Big Data, UI/UX for human-centric computing, Computing Service, Bioinformatics and Bio-Inspired Computing and will show recent advances on various aspects of computing technology, Ubiquitous Computing Services and its application.

Computational Finance and Its Applications II Nov 28 2021 Featuring papers from the Second International Conference on Computational Finance and its Applications, the text includes papers that encompass a wide range of topics such as risk management, derivatives pricing, credit risk, trading strategies, portfolio management and asset allocation, and market analysis.

Korovkin-type Approximation Theory and Its Applications Nov 04 2019 The series is devoted to the publication of monographs and high-level textbooks in mathematics, mathematical methods and their applications. Apart from covering important areas of current interest, a major aim is to make topics of an interdisciplinary nature accessible to the non-specialist. The works in this series are addressed to advanced students and researchers in mathematics and theoretical physics. In addition, it can serve as a guide for lectures and seminars on a graduate level. The series de Gruyter Studies in Mathematics was founded ca. 30 years ago by the late Professor Heinz Bauer and Professor Peter Gabriel with the aim to establish a series of monographs and textbooks of high standard, written by scholars with an international reputation presenting current fields of research in pure and applied mathematics. While the editorial board of the Studies has changed with the years, the aspirations of the Studies are unchanged. In times of rapid growth of mathematical knowledge carefully written monographs and textbooks written by experts are needed more than ever, not least to pave the way for the next generation of mathematicians. In this sense the editorial board and the publisher of the Studies are devoted to continue the Studies as a service to the mathematical community. Please submit any book proposals to Niels Jacob.

Lie Theory and Its Applications in Physics V Jan 31 2022 This volume is targeted at theoretical physicists, mathematical physicists and mathematicians working on mathematical models for physical systems based on symmetry methods and in the field of Lie theory understood in the widest sense. It includes contributions on Lie theory, with two papers by the famous mathematician Kac (one paper with Bakalov), further papers by Aoki, Moens. Some other important contributions are in: field theory OCo Todorov, Grosse, Kreimer, Sokatchev, Gomez; string theory OCo Minwalla, Staudacher, Kostov; integrable systems OCo Belavin, Helminck, Ragoucy; quantum-mechanical and probabilistic systems OCo Goldin, Van der Jeugt, Leandre; quantum groups and related objects OCo Jakobsen, Arnaudon, Andruskiewitsch; and others. The proceedings have been selected for coverage in: . OCo Index to Scientific & Technical Proceedings- (ISTP- / ISI Proceedings). OCo Index to Scientific & Technical Proceedings (ISTP CDRom version / ISI Proceedings). OCo CC Proceedings OCo Engineering & Physical Sciences."

Dynamic Programming and Its Applications Mar 01 2022 Dynamic Programming and Its Applications provides information pertinent to the theory and application of dynamic programming. This book presents the development and future directions for dynamic programming. Organized into four parts encompassing 23 chapters, this book begins with an overview of recurrence conditions for countable state Markov decision problems, which ensure that the optimal average reward exists and satisfies the functional equation of dynamic programming. This text then provides an extensive analysis of the theory of successive approximation for Markov decision problems. Other chapters consider the computational methods for deterministic, finite horizon problems, and present a unified and insightful presentation of several foundational questions. This book discusses as well the relationship between policy iteration and Newton's method. The final chapter deals with the main factors severely limiting the application of dynamic programming in practice. This book is a valuable resource for growth theorists, economists, biologists, mathematicians, and applied management scientists.

Grey Game Theory and Its Applications in Economic Decision-Making Sep 14 2020 To make the best decisions, you need the best information. However, because most issues in game theory are grey, nearly all recent research has been carried out using a simplified method that considers grey systems as white ones. This often results in a forecasting function that is far from satisfactory when applied to many real situations. Grey Game Theory and Its Applications in Economic Decision Making introduces classic game theory into the realm of grey system theory with limited knowledge. The book resolves three theoretical issues: A game equilibrium of grey game A reasonable

explanation for the equilibrium of a grey matrix of static nonmatrix game issues based on incomplete information The Centipede Game paradox, which has puzzled theory circles for a long time and greatly enriched and developed the core methods of subgame Nash perfect equilibrium analysis as a result The book establishes a grey matrix game model based on pure and mixed strategies. The author proposes the concepts of grey saddle points, grey mixed strategy solutions, and their corresponding structures and also puts forward the models and methods of risk measurement and evaluation of optimal grey strategies. He raises and solves the problems of grey matrix games. The book includes definitions of the test rules of information distortion experienced during calculation, the design of tokens based on new interval grey numbers, and new arithmetic laws to manipulate grey numbers. These features combine to provide a practical and efficient tool for forecasting real-life economic problems.

Fault Diagnosis for Linear Discrete Time-Varying Systems and Its Applications May 03 2022 This book focuses on fault diagnosis for linear discrete time-varying (LDTV) systems and its applications in modern engineering processes, with more weighting placed on the development of theory and methodologies. A comprehensive and systematic study on fault diagnosis for LDTV systems is provided, covering H²-optimization-based fault diagnosis, H[∞]-filtering-based fault diagnosis, parity space-based fault diagnosis, Krein space technique-aided fault detection and fault estimation, and their typical applications in linear/nonlinear processes such as satellite attitude control systems and INS/GPS systems. This book benefits researchers, engineers, and graduate students in the fields of control engineering, electrical and electronic engineering, instrumentation science, and optoelectronic engineering.

Good Thinking Sep 26 2021 These sparkling essays by a gifted thinker offer philosophical views on the roots of statistical interference. A pioneer in the early development of computing, Irving J. Good made fundamental contributions to the theory of Bayesian inference and was a key member of the team that broke the German Enigma code during World War II. Good maintains that a grasp of probability is essential to answering both practical and philosophical questions. This compilation of his most accessible works concentrates on philosophical rather than mathematical subjects, ranging from rational decisions, randomness, and the nature of probability to operational research, artificial intelligence, cognitive psychology, and chess. These twenty-three self-contained articles represent the author's work in a variety of fields but are unified by a consistently rational approach. Five closely related sections explore Bayesian rationality; probability; corroboration, hypothesis testing, and simplicity; information and surprise; and causality and explanation. A comprehensive index, abundant references, and a bibliography refer readers to classic and modern literature. Good's thought-provoking observations and memorable examples provide scientists, mathematicians, and historians of science with a coherent view of probability and its applications.

Introduction to Conformal Invariance and Its Applications to Critical Phenomena Oct 04 2019 The history of critical phenomena goes back to the year 1869 when Andrews discovered the critical point of carbon dioxide, located at about 31°C and 73 atmospheres pressure. In the neighborhood of this point the carbon dioxide was observed to become opalescent, that is, light is strongly scattered. This is nowadays interpreted as coming from the strong fluctuations of the system close to the critical point. Subsequently, a wide variety of physical systems were realized to display critical points as well. Of particular importance was the observation of a critical point in ferromagnetic iron by Curie. Further examples include multicomponent fluids and alloys, superfluids, superconductors, polymers and may even extend to the quark-gluon plasma and the early universe as a whole. Early theoretical investigation tried to reduce the problem to a very small number of degrees of freedom, such as the van der Waals equation and mean field approximations and culminating in Landau's general theory of critical phenomena. In a dramatic development, Onsager's exact solution of the two-dimensional Ising model made clear the important role of the critical fluctuations. Their role was taken into account in the subsequent developments leading to the scaling theories of critical phenomena and the renormalization group. These developments have achieved a precise description of the close neighborhood of the critical point and results are often in good agreement with experiments. In contrast to the general understanding a century ago, the presence of fluctuations on all length scales at a critical point is today emphasized.

Advances in Soft Computing and Its Applications Oct 16 2020 The two-volume set LNAI 8265 and LNAI 8266 constitutes the proceedings of the 12th Mexican International Conference on Artificial Intelligence, MICAI 2013, held in Mexico City, Mexico, in November 2013. The total of 85 papers presented in these proceedings were carefully reviewed and selected from 284 submissions. The first volume deals with advances in artificial intelligence and its applications and is structured in the following five sections: logic and reasoning; knowledge-based systems and multi-agent systems; natural language processing; machine translation and bioinformatics and medical applications. The second volume deals with advances in soft computing and its applications and is structured in the following eight sections: evolutionary and nature-inspired metaheuristic algorithms; neural networks and hybrid intelligent systems; fuzzy systems; machine learning and pattern recognition; data mining; computer vision and image processing; robotics, planning and scheduling and emotion detection, sentiment analysis and opinion mining.

Deductive Databases and Their Applications Jun 11 2020 Deductive Databases and their Applications is an introductory text aimed at undergraduate students with some knowledge of database and information systems. The text comes complete with exercises and solutions to encourage students to tackle problems practically as well as theoretically. The author presents the origins of deductive databases in Prologue before proceeding to analyse the main deductive database paradigm - the data-log model. The final chapters are dedicated to closely related topics such as prepositional expert systems, integrity constraint specification and evaluation, and update propagation. Particular attention is paid to CASE tool repositories.

Dynamic Fuzzy Logic and Its Applications Jun 23 2021 Dynamic fuzzy problem are problems that are universally focused by academics. Mathematicians and cybernetic experts have used fuzzy logic to developed theories and solve static problems in so called subjective and objective worlds. This book includes 12 chapters. Chapter 1 is about basic conceptions of Dynamic Fuzzy Sets (DFS). Chapter 2 introduces Dynamic Fuzzy (DF) decomposition theorem. Chapter 3 is about L form of DFS module structure. Chapter 4 is about representation theorem of DFS. Chapter 5 introduces extension theorem of DFS. Chapter 6 is about DF measure theory. In chapter 7 it is Dynamic Fuzzy Logic (DFL). Chapter 8 is about reasoning methods of DFL. Chapter 9 is about bases of DFL programming language. Chapter 10 introduces multi-agent learning model based on DFL. Chapter 11 is about autonomic computing model based on DFL. The last Chapter introduces application of DFL in machine learning.

Computational Science and Its Applications – ICCSA 2021 Jul 05 2022 ??The ten-volume set LNCS 12949 – 12958 constitutes the proceedings of the 21st International Conference on Computational Science and Its Applications, ICCSA 2021, which was held in Cagliari, Italy, during September 13 – 16, 2021. The event was organized in a hybrid mode due to the Covid-19 pandemic. The 466 full and 18 short papers presented in these books were carefully reviewed and selected from 1588 submissions. Part VII of the set includes the proceedings of the following workshops: ??International Workshop on Geomatics for Resource Monitoring and Management (GRMM 2021); International Workshop on Geomatics in Agriculture and Forestry: new advances and perspectives (Geo-for-Agr 2021); 12th International Symposium on Software Quality (SQ 2021); 10th International Workshop on Collective, Massive and Evolutionary Systems (IWCES 2021); International Workshop on Land Use monitoring for Sustainability (LUMS 2021); International Workshop on Machine Learning for Space and Earth Observation Data (MALSEOD 2021); International Workshop on Building multi-dimensional models for assessing complex environmental systems (MES 2021); International Workshop on Ecosystem Services: nature's contribution to people in practice. Assessment frameworks, models, mapping, and implications (NC2P 2021).

Bulletin Jul 01 2019

Web Technology and Its Applications Oct 08 2022 This book embodies a distillation of topics that we, as educators, have frequently covered in the past two decades in various undergraduate courses related to Web Technology and its applications in VTU, Belgaum. This book can also serve the purpose of material for a more advanced level where the reader is exposed to alternate and more contemporary computational frameworks that are becoming common and more suitable.

Federal Communications Commission Reports Aug 14 2020

Computational Science and Its Applications -- ICCSA 2015 Aug 06 2022 The five-volume set LNCS 9155-9159 constitutes the refereed proceedings of the 15th International Conference on Computational Science and Its Applications, ICCSA 2015, held in Banff, AB, Canada, in June 2015. The 232 revised full papers presented in 22 workshops and a general track were carefully reviewed and selected from 780 initial submissions for inclusion in this volume. They cover various areas in computational science ranging from computational science technologies to specific areas of computational science such as computational geometry and security.

Catalogue of the Library of Wabash College ... Mar 09 2020

Engineering Plasticity and Its Applications from Nanoscale to Macroscale Dec 18 2020 The primary objective of the Asia-Pacific Conference on Engineering Plasticity and Its Applications (AEPA) is to provide a free forum for exchanging ideas and introducing the latest research findings in the field of engineering plasticity. This conference is unique among the related conferences in that it provides a forum for all fields of plasticity so that multi-disciplinary research works are encouraged. This proceedings volume consists of papers presented at AEPA2008, and covers the following categories in all fields of engineering plasticity: constitutive modeling; damage, fracture, fatigue and failure; dynamic loading and crash dynamics; engineering applications and case studies; experimental and numerical techniques; molecular dynamics; nano, meso, micro and crystal plasticity; phase transformations; plastic instability and strain localization; plasticity in advanced materials; plasticity in materials processing technology; plasticity in tribology; porous, cellular and composite materials; structural plasticity; superplasticity; and time-dependent deformation. Ranging from nanoscale to macroscale applications of engineering plasticity, this book touches upon fields as diverse as mechanical engineering, materials science, physics, chemistry and civil engineering.

Soft Computing and its Engineering Applications Dec 06 2019 This book constitutes the refereed proceedings of the Second International Conference on Soft Computing and its Engineering Applications, icSoftComp 2020, held in Changa, India, in December 2020. Due to the COVID-19 pandemic the conference was held online. The 24 full papers and 4 short papers presented were carefully reviewed and selected from 252 submissions. The papers present recent research on theory and applications in fuzzy computing, neuro computing, and evolutionary computing.

Advances in Animal Biotechnology and its Applications Dec 30 2021 This book explores the recent advancements in cutting-edge techniques and applications of Biotechnology. It provides an overview of prospects and applications while emphasizing modern, and emerging areas of Biotechnology. The chapters are dedicated to various field of Biotechnology including, genome editing, probiotics, in-silico drug designing, nanoparticles and its applications, molecular diagnostics, tissue engineering, cryopreservation, and antioxidants. It is useful for both academicians and researchers in the various disciplines of life sciences, agricultural sciences, medicine, and Biotechnology in Universities, Research Institutions, and Biotech companies. This book provides the readers with a comprehensive knowledge of topics in Genomics, Bionanotechnology, Drug Designing, Diagnostics, Therapeutics, Food and Environmental Biotechnology. The chapters have been written with special reference to the latest developments in the frontier areas of Biotechnology that impacts the Biotech industries.

Nonlinear Mathematics for Uncertainty and its Applications Feb 06 2020 This volume is a collection of papers presented at the international conference on Nonlinear Mathematics for Uncertainty and Its Applications (NLMUA2011), held at Beijing University of Technology during the week of September 7--9, 2011. The conference brought together leading researchers and practitioners involved with all aspects of nonlinear mathematics for uncertainty and its applications. Over the last fifty years there have been many attempts in extending the theory of classical probability and statistical models to the generalized one which can cope with problems of inference and decision making when the model-related information is scarce, vague, ambiguous, or incomplete. Such attempts include the study of nonadditive measures and their integrals, imprecise probabilities and random sets, and their applications in information sciences, economics, finance, insurance, engineering, and social sciences. The book presents topics including nonadditive measures and nonlinear integrals, Choquet, Sugeno and other types of integrals, possibility theory, Dempster-Shafer theory, random sets, fuzzy random sets and related statistics, set-valued and fuzzy stochastic processes, imprecise probability theory and related statistical models, fuzzy mathematics, nonlinear functional analysis, information theory, mathematical finance and risk managements, decision making under various types of uncertainty, and others.

Aggregation Operators for Various Extensions of Fuzzy Set and Its Applications in Transportation Problems Aug 02 2019 This book introduces readers to the fundamentals of transportation problems under the fuzzy environment and its extensions. It also discusses the limitations and drawbacks of (1) recently proposed aggregation operators under the fuzzy environment and its various extensions; (2) recently proposed methods for solving transportation problems under the fuzzy environment; and (3) recently proposed methods for solving transportation problems under the intuitionistic fuzzy environment. In turn, the book proposes simplified methods to overcome these limitations.

Internet of Things and Its Applications Nov 09 2022 This volume constitutes selected papers presented at the International Conference on IoT and its Applications 2020. The research papers presented were carefully reviewed and selected from several initial submissions on the topics - the Internet of Things (IoT) and its applications such as smart cities, smart devices, agriculture, transportation and logistics, healthcare, etc. The book contains peer-reviewed chapters written by leading international scholars from around the world. This book will appeal to students, practitioners, industry professionals, and researchers working in the field of IoT and its integration with other technologies to develop comprehensive solutions to real-life problems.

Catastrophe Theory and Its Applications Jul 13 2020 First integrated treatment of main ideas behind René Thom's theory of catastrophes stresses detailed applications in the physical sciences. Mathematics of theory explained with a minimum of technicalities. Over 200 illustrations clarify text designed for researchers and postgraduate students in engineering, mathematics, physics and biology. 1978 edition. Bibliography.

Biosensors and Their Applications Jan 07 2020 A biosensor is a device in which a bioactive layer lies in direct contact with a transducer whose responses to change in the bioactive layer generate electronic signals for interpretation. The bioactive layer may consist of membrane-bound enzymes, anti-bodies, or receptors. The potential of this blend of electronics and biotechnology includes the direct assay of clinically important substrates (e.g. blood glucose) and of substances too unstable for storage or whose concentrations fluctuate rapidly. Written by the leading researchers in the field, this book reflects the most current developments in successfully constructing a biosensor. Major applications are in the fields of pharmacology, molecular biology, virology and electronics.

Total Positivity and Its Applications Mar 21 2021 This volume contains both invited lectures and contributed talks presented at the meeting on Total Positivity and its Applications held at the guest house of the University of Zaragoza in Jaca, Spain, during the week of September 26-30, 1994. There were present at the meeting almost fifty researchers from fourteen countries. Their interest in the subject of Total Positivity made for a stimulating and fruitful exchange of scientific information. Interest to participate in the meeting exceeded our expectations. Regrettably, budgetary constraints forced us to restrict the number of attendees. Professor S. Karlin, of Stanford University, who planned to attend the meeting had to cancel his participation at the last moment. Nonetheless, his almost universal spiritual presence energized and inspired all of us in Jaca. More than anyone, he influenced the content, style and quality of the presentations given at the meeting. Every article in these Proceedings (except some by Karlin himself) references his influential treatise Total Positivity, Volume I, Stanford University Press, 1968. Since its appearance, this book has intrigued and inspired the minds of many researchers (one of us, in his formative years, read the galley proofs and the other of us first doubted its value but then later became its totally committed disciple). All of us present at the meeting encourage Professor Karlin to return to the task of completing the anxiously awaited Volume 11 of Total Positivity.

Computational Science and Its Applications - ICCSA 2006 Apr 21 2021 The five-volume set LNCS 3980-3984 constitutes the refereed proceedings of the International Conference on Computational Science and Its Applications, ICCSA 2006. The volumes present a total of 664 papers organized according to the five major conference themes: computational methods, algorithms and applications high performance technical computing and networks advanced and emerging applications geometric modelling, graphics and visualization information systems and information technologies. This is Part I.

Quantum Measurement Theory and its Applications Jul 25 2021 Recent experimental advances in the control of quantum superconducting circuits, nano-mechanical resonators and photonic crystals has meant that quantum measurement theory is now an indispensable part of the modelling and design of experimental technologies. This book, aimed at graduate students and researchers in physics, gives a thorough introduction to the basic theory of quantum measurement and many of its important modern applications. Measurement and control is explicitly treated in superconducting circuits and optical and opto-mechanical systems, and methods for deriving the Hamiltonians of superconducting circuits are introduced in detail. Further applications covered include feedback control, metrology, open systems and thermal environments, Maxwell's demon, and the quantum-to-classical transition.

Computational Science and Its Applications – ICCSA 2022 Workshops Jan 19 2021 The eight-volume set LNCS 13375 – 13382 constitutes the proceedings of the 22nd International Conference on Computational Science and Its Applications, ICCSA 2022, which was held in Malaga, Spain during July 4 – 7, 2022. The first two volumes contain the proceedings from ICCSA 2022, which are the 57 full and 24 short papers presented in these books were carefully reviewed and selected from 279 submissions. The other six volumes present the workshop proceedings, containing 285 papers out of 815 submissions. These six volumes includes the proceedings of the following workshops: ? Advances in Artificial Intelligence Learning Technologies: Blended Learning, STEM, Computational Thinking and Coding (AAILT 2022); Workshop on Advancements in Applied Machine-learning and Data Analytics (AAMDA 2022); Advances in information Systems and Technologies for Emergency management, risk assessment and mitigation based on the Resilience (ASTER 2022); Advances in Web Based Learning (AWBL 2022); Blockchain and

Distributed Ledgers: Technologies and Applications (BDLTA 2022); Bio and Neuro inspired Computing and Applications (BIONCA 2022); Configurational Analysis For Cities (CA Cities 2022); Computational and Applied Mathematics (CAM 2022), Computational and Applied Statistics (CAS 2022); Computational Mathematics, Statistics and Information Management (CMSIM); Computational Optimization and Applications (COA 2022); Computational Astrochemistry (CompAstro 2022); Computational methods for porous geomaterials (CompPor 2022); Computational Approaches for Smart, Conscious Cities (CASCC 2022); Cities, Technologies and Planning (CTP 2022); Digital Sustainability and Circular Economy (DiSCE 2022); Econometrics and Multidimensional Evaluation in Urban Environment (EMEUE 2022); Ethical AI applications for a human-centered cyber society (EthicAI 2022); Future Computing System Technologies and Applications (FiSTA 2022); Geographical Computing and Remote Sensing for Archaeology (GCRSArcheo 2022); Geodesign in Decision Making: meta planning and collaborative design for sustainable and inclusive development (GDM 2022); Geomatics in Agriculture and Forestry: new advances and perspectives (GeoForAgr 2022); Geographical Analysis, Urban Modeling, Spatial Statistics (Geog-An-Mod 2022); Geomatics for Resource Monitoring and Management (GRMM 2022); International Workshop on Information and Knowledge in the Internet of Things (IKIT 2022); 13th International Symposium on Software Quality (ISSQ 2022); Land Use monitoring for Sustainability (LUMS 2022); Machine Learning for Space and Earth Observation Data (MALSEOD 2022); Building multi-dimensional models for assessing complex environmental systems (MES 2022); MOdels and indicators for assessing and measuring the urban settlement deVELOPMENT in the view of ZERO net land take by 2050 (MOVEto0 2022); Modelling Post-Covid cities (MPCC 2022); Ecosystem Services: nature's contribution to people in practice. Assessment frameworks, models, mapping, and implications (NC2P 2022); New Mobility Choices For Sustainable and Alternative Scenarios (NEMOB 2022); 2nd Workshop on Privacy in the Cloud/Edge/IoT World (PCEIoT 2022); Psycho-Social Analysis of Sustainable Mobility in The Pre- and Post-Pandemic Phase (PSYCHE 2022); Processes, methods and tools towards RESilient cities and cultural heritage prone to SOD and ROD disasters (RES 2022); Scientific Computing Infrastructure (SCI 2022); Socio-Economic and Environmental Models for Land Use Management (SEMLUM 2022); 14th International Symposium on Software Engineering Processes and Applications (SEPA 2022); Ports of the future - smartness and sustainability (SmartPorts 2022); Smart Tourism (SmartTourism 2022); Sustainability Performance Assessment: models, approaches and applications toward interdisciplinary and integrated solutions (SPA 2022); Specifics of smart cities development in Europe (SPEED 2022); Smart and Sustainable Island Communities (SSIC 2022); Theoretical and Computational Chemistry and its Applications (TCCMA 2022); Transport Infrastructures for Smart Cities (TISC 2022); 14th International Workshop on Tools and Techniques in Software Development Process (TTSDP 2022); International Workshop on Urban Form Studies (UForm 2022); Urban Regeneration: Innovative Tools and Evaluation Model (URITEM 2022); International Workshop on Urban Space and Mobilities (USAM 2022); Virtual and Augmented Reality and Applications (VRA 2022); Advanced and Computational Methods for Earth Science Applications (WACM4ES 2022); Advanced Mathematics and Computing Methods in Complex Computational Systems (WAMCM 2022).

Knowledge Computing and Its Applications Feb 17 2021 This book provides a major forum for the technical advancement of knowledge management and its applications across diversified domains. Pursuing an interdisciplinary approach, it focuses on methods used to identify and acquire valid, potentially useful knowledge sources. Managing the gathered knowledge and applying it to multiple domains including health care, social networks, data mining, recommender systems, image processing, pattern recognition and predictions using machine learning techniques is the major strength of this book. Effective knowledge management has become a key to the success of business organizations, and can offer a substantial competitive edge. So as to be accessible to all scholars, this book combines the core ideas of knowledge management and its applications in numerous domains, illustrated in case studies. The techniques and concepts proposed here can be extended in future to accommodate changing business organizations' needs as well as practitioners' innovative ideas.

Complex Networks & Their Applications VI Apr 09 2020 This book highlights cutting-edge research in the field of network science, offering scientists, researchers, students and practitioners a unique update on the latest advances in theory and a multitude of applications. It presents the peer-reviewed proceedings of the VI International Conference on Complex Networks and their Applications (COMPLEX NETWORKS 2017), which took place in Lyon on November 29 – December 1, 2017. The carefully selected papers cover a wide range of theoretical topics such as network models and measures; community structure, network dynamics; diffusion, epidemics and spreading processes; resilience and control as well as all the main network applications, including social and political networks; networks in finance and economics; biological and ecological networks and technological networks.

Antioxidants in Foods and Its Applications Apr 02 2022 Free radicals are atoms or molecules containing unpaired electrons. Damage occurs when the free radical encounters another molecule and seeks to find another electron to pair its unpaired electron. Free radicals can cause mutation in different biological compounds such as protein, nucleic acids, and lipids, and the damage caused by the free radicals lead to various diseases (cancer, cardiovascular disease, aging, etc.). Antioxidants are helpful in reducing and preventing damage from free radical reactions because of their ability to donate electrons, which neutralize the radical without forming another. Ascorbic acid, for example, can lose an electron to a free radical and remain stable itself by passing its unstable electron around the antioxidant molecule. Unfortunately, new data indicate that the synthetic antioxidants used in the industry could have carcinogenic effects on human cells, thus fueling an intense search for new, natural, and efficient antioxidants. Therefore, the current book discusses the role and source of antioxidant compounds in nutrition and diets. Also, the current book includes nine chapters contributed by experts around the world, and the chapters are categorized into two sections: "Antioxidant Compounds and Biological Activities" and "Natural Antioxidants and Applications."

Heavy Ion Physics and Its Applications Oct 28 2021 This proceedings volume includes 66 papers on the latest developments in heavy ion collisions, the synthesis of new elements and nuclei far from stability, nuclear structure, physics with radioactive beams, and applications of heavy ion beams. Contents: Hard Photons as Probes of Intermediate Energy Heavy Ion Reactions (R H Siemssen)Dilepton Production in Elementary Processes on the Nucleon (U Mosel)A Comprehensive Study of Fission in 24.3 MeV/Nucleon U Reactions Induced on C, Si, Ni, Au Targets (E Piasecki et al.)Coherent Rotation of Excited Dinuclear Systems (G Pappalardo et al.)Discovery of the Superheavy Elements 110 and 111-Shell Stabilization in the Deformed Shell $Z = 108/N = 162$ (P Armbruster)From 20Mg to the 100Sn Region: Experimental Techniques for Decay Studies of Proton Drip-Line Nuclei (E Roeckl)Measurements of Nuclear Masses and Half-Lives in the Storage Ring ESR (O Klepper et al.)R1 Beam Factory Project and Recent Studies with Radioactive Beams at RIKEN (I Tanihata)The Charge Exchange Reaction Induced by the Neutron Rich Halo Nucleus ^6He (M D Cortina-Gil et al.)New Research Opportunities with a Recoil Mass Spectrometer and Radioactive Ion Beams (J H Hamilton et al.)and other papers Readership: Nuclear physicists. keywords:

Mathematical Theory of Elasticity of Quasicrystals and Its Applications Jun 04 2022 This inter-disciplinary work covering the continuum mechanics of novel materials, condensed matter physics and partial differential equations discusses the mathematical theory of elasticity of quasicrystals (a new condensed matter) and its applications by setting up new partial differential equations of higher order and their solutions under complicated boundary value and initial value conditions. The new theories developed here dramatically simplify the solving of complicated elasticity equation systems. Large numbers of complicated equations involving elasticity are reduced to a single or a few partial differential equations of higher order. Systematical and direct methods of mathematical physics and complex variable functions are developed to solve the equations under appropriate boundary value and initial value conditions, and many exact analytical solutions are constructed. The dynamic and non-linear analysis of deformation and fracture of quasicrystals in this volume presents an innovative approach. It gives a clear-cut, strict and systematic mathematical overview of the field. Comprehensive and detailed mathematical derivations guide readers through the work. By combining mathematical calculations and experimental data, theoretical analysis and practical applications, and analytical and numerical studies, readers will gain systematic, comprehensive and in-depth knowledge on continuum mechanics, condensed matter physics and applied mathematics.