

International Journal Of Applied Mathematics

This book focuses on unhealthy cyber-physical systems. Consisting of 14 chapters, it discusses recognizing the beginning of the fault, diagnosing the appearance of the fault, and stopping the system or switching to a special control mode known as fault-tolerant control. Each chapter includes the background, motivation, quantitative development (equations), and case studies/illustration/tutorial (simulations, experiences, curves, tables, etc.). Readers can easily tailor the techniques presented to accommodate their ad hoc applications.

International Journal of Applied Mathematics and Computer ScienceInternational Journal of Applied MathematicsIJAM.Applied Mathematical Analysis: Theory, Methods, and ApplicationsSpringer

Stock management and control is a critical element to the success and overall financial well-being of an organization. Through the application of innovative practices and technology, businesses are now able to effectively monitor their operations and manage their inventory by evaluating sales patterns and customer preferences. The Handbook of Research on Promoting Business Process Improvement Through Inventory Control Techniques is a critical scholarly resource that examines optimization techniques, data mining concepts, and genetic algorithms to manage inventory control. Featuring coverage on a broad range of topics such as logistics and supply chain management, stochastic inventory modelling, and inventory management in healthcare, this book is geared towards academicians, practitioners, and researchers seeking various research methods to get optimal ordering policy.

Applied Mathematical Analysis: Theory, Methods, and Applications

The Encyclopedia of Neutrosophic Researchers, 3rd volume

Handbook of Research on Applied AI for International Business and Marketing Applications

6th ICCST 2019, Kota Kinabalu, Malaysia, 29-30 August 2019

Florentin Smarandache is a professor of mathematics at the University of New Mexico, United States. He got his MSc in Mathematics and Computer Science from the University of Craiova, Romania, PhD in Mathematics from the State University of Kishinev, and Postdoctoral in Applied Mathematics from Okayama University of Sciences, Japan. He is the founder of neutrosophy (generalization of dialectics), neutrosophic set, logic, probability and statistics since 1995 and has published hundreds of papers and books on neutrosophic physics, superluminal and instantaneous physics, unmatter, quantum paradoxes, absolute theory of relativity, redshift and blueshift due to the medium gradient and refraction index besides the Doppler effect, paradoxism, outerart, neutrosophy as a new branch of philosophy, Law of Included Multiple-Middle, multispace and multistructure, hypersoft set, degree of dependence and independence between neutrosophic components, refined neutrosophic set, neutrosophic over-under-off-set, plithogenic set, neutrosophic triplet and duplet structures, quadruple neutrosophic structures, extension of algebraic structures to NeuroAlgebras and AntiAlgebras, DSMT and so on to many peer-reviewed international journals and many books and he presented papers and plenary lectures to many international conferences around the world.

“Neutrosophic Sets and Systems” has been created for publications on advanced studies in neutrosophy, neutrosophic set, neutrosophic logic, neutrosophic probability, neutrosophic statistics that started in 1995 and their applications in any field, such as the neutrosophic structures developed in algebra, geometry, topology, etc. Some articles in this issue: n-Refined Neutrosophic Modules, A Neutrosophic Approach to Digital Images, A Novel Method for Neutrosophic Assignment Problem by using Interval-Valued Trapezoidal Neutrosophic Number.

This is the third volume of the Encyclopedia of Neutrosophic Researchers, edited from materials offered by the authors who responded to the editor’s invitation. The authors are listed alphabetically. The introduction contains a short history of neutrosophics, together with links to the main papers and books.

International Journal of Applied Mathematics and Applications

The Industrial Electronics Handbook - Five Volume Set

International Journal of Pure and Applied Mathematics

Generalized Fractional Order Differential Equations Arising in Physical Models

Advanced Mathematical Techniques in Engineering Sciences

This book addresses key aspects of recent developments in applied mathematical analysis and its use. It also highlights a broad range of applications from science, engineering, technology and social perspectives. Each chapter investigates selected research problems and presents a balanced mix of theory, methods and applications for the chosen topics. Special emphasis is placed on presenting basic developments in applied mathematical analysis, and on highlighting the latest advances in this research area. The book is presented in a self-contained manner as far as possible, and includes sufficient references to allow the interested reader to pursue further research in this still-developing field. The primary audience for this book includes graduate students, researchers and educators; however, it will also be useful for general readers with an interest in recent developments in applied mathematical analysis and applications.

This book gathers selected papers presented at the conference of the Forum for Interdisciplinary Mathematics (FIM), held at Palau Macaya, Barcelona, on 18 to 20 November, 2015. The event was co-organized by the University of Barcelona (Spain), the Spanish Royal Academy of Economic and Financial Sciences (Spain) and the Forum for Interdisciplinary Mathematics (India). This instalment of the conference was presented with the title “Applied Mathematics and Computational Intelligence” and particularly focused on the use of Mathematics and Computational Intelligence techniques in a diverse range of scientific disciplines, as well as their applications in real-world problems. The book presents thirty peer-reviewed research papers, organised into four topical sections: on Mathematical Foundations; Computational Intelligence and Optimization Techniques; Modelling and Simulation Techniques; and Applications in Business and Engineering. This book will be of great interest to anyone working in the area of applied mathematics and computational intelligence and will be especially useful for scientists and graduate students pursuing research in these fields.

Industrial electronics systems govern so many different functions that vary in complexity-from the operation of relatively simple applications, such as electric motors, to that of more complicated machines and systems, including robots and entire fabrication processes. The

Industrial Electronics Handbook, Second Edition combines traditional and new

Diagnosis, Fault Detection & Tolerant Control

IJAM.

International Journal of Applied Mathematics and Computer Science

Applied and Industrial Mathematics, Venice—2, 1998

Introduction, Meta-analysis, and Scrutinization

In the past, practical applications motivated the development of mathematical theories, which then became the subject of study in pure mathematics where abstract concepts are studied for their own sake. The activity of applied mathematics is thus intimately connected with research in pure mathematics, which is also referred to as theoretical mathematics. Theoretical and Applied Mathematics in International Business is an essential research publication that explores the importance and implications of applied and theoretical mathematics within international business, including areas such as finance, general management, sales and marketing, and supply chain management. Highlighting topics such as data mining, global economics, and general management, this publication is ideal for scholars, specialists, managers, corporate professionals, researchers, and academicians.

Assignment problem (AP) is well-studied and important area in optimization. In this research manuscript, an assignment problem in neutrosophic environment, called as neutrosophic assignment problem (NAP), is introduced. The problem is proposed by using the interval-valued trapezoidal neutrosophic numbers in the elements of cost matrix. As per the concept of score function, the interval-valued trapezoidal neutrosophic assignment problem (IVTNAP) is transformed to the corresponding an interval-valued AP. To optimize the objective function in interval form, we use the order relations. These relations are the representations of choices of decision maker. The maximization (or minimization) model with objective function in interval form is changed to multi-objective based on order relations introduced by the decision makers' preference in case of interval profits (or costs). In the last, we solve a numerical example to support the proposed solution methodology.

This book presents select proceedings of the International Conference on Applied Mathematics in Science and Engineering (AMSE 2019). Various topics covered include computational fluid dynamics, applications of differential equations in engineering, numerical methods for ODEs and PDEs, mathematical modeling and analysis of biological systems, optimal control and controllability of differential equations, fractional calculus and its applications, nonlinear analysis, and functional analysis. This book will be of interest to researchers, academicians and students in the fields of applied sciences, mathematics and engineering.

Theories, Methods, and Applications

Ratio of Momentum Diffusivity to Thermal Diffusivity

Directory of Scholarly Journals in Turkey

Applied Mechanics Reviews

Functional Equations, Integral Equations, Differential Equations and Applications

This volume is the first of two containing selected papers from the International Conference on Advances in Mathematical Sciences (ICAMS), held at the Vellore Institute of Technology in December 2017. This meeting brought together researchers from around the world to share their work, with the aim of promoting collaboration as a means of solving various problems in modern science and engineering. The authors of each chapter present a research problem, techniques suitable for solving it, and a discussion of the results obtained. These volumes will be of interest to both theoretical- and application-oriented individuals in academia and industry. Papers in Volume I are dedicated to active and open areas of research in algebra, analysis, operations research, and statistics, and those of Volume II consider differential equations, fluid mechanics, and graph theory.

Without mathematics no science would survive. This especially applies to the engineering sciences which highly depend on the applications of mathematics and mathematical tools such as optimization techniques, finite element methods, differential equations, fluid dynamics, mathematical modelling, and simulation. Neither optimization in engineering, nor the performance of safety-critical system and system security; nor high assurance software architecture and design would be possible without the development of mathematical applications. De Gruyter Series on the Applications of Mathematics in Engineering and Information Sciences (AMEIS) focusses on the latest applications of engineering and information technology that are possible only with the use of mathematical methods. By identifying the gaps in knowledge of engineering applications the AMEIS series fosters the international interchange between the sciences and keeps the reader informed about the latest developments.

This book gathers the proceedings of the Sixth International Conference on Computational Science and Technology 2019 (ICCST2019), held in Kota Kinabalu, Malaysia, on 29–30 August 2019. The respective contributions offer practitioners and researchers a range of new computational techniques and solutions, identify emerging issues, and outline future research directions, while also showing them how to apply the latest large-scale, high-performance computational methods.

Intelligent Systems in Technical and Medical Diagnostics

International Journal of Applied Mathematics

Techniques in Engineering Sciences

International Journal of Applied Mathematics & Statistics

A Novel Method for Neutrosophic Assignment Problem by using Interval-Valued Trapezoidal Neutrosophic Number

This book is the second edition of the well-known textbook Modelling Rock Fracturing Processes. The new and extended edition provides the theoretical background of rock fracture mechanics used for modelling of 2-D and 3-D geomechanics problems and processes. Fundamentals of rock fracture mechanics integrated with experimental studies of rock fracturing processes are highlighted. The computer programs FRACOD 2D and 3D are used to analyse fracture initiation and propagation for the three fracture modes: Mode I, II and III. Coupled fracture modelling with other continuous and distinct element codes including FLAC, PFC, RPPA, TOUGH are also described. A series of applications of fracture modelling with importance for modern society is presented and discussed by distinguished rock fracture modelling experts.

This book presents a systematic introduction, practical meaning, and measurement of thermo-physical properties (i.e. viscosity, density, thermal conductivity, specific heat capacity, and thermal diffusivity) associated with the Prandtl number. The method of slope linear regression through the data points is presented in this textbook as a methodology for a deeper and insightful scrutinization. The book serves as a reference book for scientific investigators, Teachers of Fluid Mechanics, Experts on Heat and Mass Transfer, Researchers on Boundary layer flows, Mechanical and Chemical Engineers, Physicists, and Postgraduate Students working on transport phenomena who need theoretical and empirical reviews on the impact of increasing the ratio of momentum diffusivity to thermal diffusivity. Features: A systematic overview of the state-of-the-art in statistical methodology for understanding changes between dependent and independent variables. Pointers to some theoretical and empirical reviews on Prandtl number. Presents in-depth analysis of various self-similar flows, emphasizing stretching induced flows, nanofluid dynamics, suction, injection, free convection, mixed convection, and forced convection. Insightful study on thermal radiation, heat sour, heat sink, energy flux due to concentration gradient, mass flux due to temperature gradient, thermo-capillary convection flow, Joule heating, viscous dissipation, thermal stratification, thermophoresis, and Brownian motion of particles.

Artificial intelligence (AI) describes machines/computers that mimic cognitive functions that humans associate with other human minds, such as learning and problem solving. As businesses have evolved to include more automation of processes, it has become more vital to understand AI and its various applications. Additionally, it is important for workers in the marketing industry to understand how to coincide with and utilize these techniques to enhance and make their work more efficient. The Handbook of Research on Applied AI for International Business and Marketing Applications is a critical scholarly publication that provides comprehensive research on artificial intelligence applications within the context of international business. Highlighting a wide range of topics such as diversification, risk management, and artificial intelligence, this book is ideal for marketers, business professionals, academicians, practitioners, researchers, and students.

Selected Papers from the "Venice-2/Symposium on Applied and Industrial Mathematics", June 11-16, 1998, Venive, Italy

A Novel Approach Of Computing With Words By Using Neutrosophic Information

Soft Computing

Recent Trends in Applied Mathematics

Select Proceedings of AMSE 2019

For many years technical and medical diagnostics has been the area of intensive scientific research. It covers well-established topics as well as emerging developments in control engineering, artificial intelligence, applied mathematics, pattern recognition and statistics. At the same time, applications of different fault diagnosis methods, especially in electrical, mechanical, chemical and medical engineering, is being observed. This monograph contains a collection of 44 carefully selected papers contributed by experts in technical and medical diagnostics, and constitutes a valuable reference for the field. The aim of the book is to show the bridge between technical and medical diagnostics based on artificial intelligence methods and techniques. It is divided into four parts: I. Soft Computing in Technical Diagnostics, II. Medical Diagnostics and Biometrics, III. Robotics and Artificial Intelligence, IV. Problems of Technical Diagnostics. The monograph will be of interest to scientists as well as academics dealing with the problems of designing technical and medical diagnosis systems. Its target readers are also junior researchers and students of computer science, artificial intelligence and related fields. Scholarly journals are the capillaries of the scientific world, ensuring the circulation of knowledge. Moreover, scholarly journals guide and indicate the scientific development in an academic field of study or in a country. Scholarly journals, which transfer and spread scientific information, properly fulfill their functions, preventing the transfer of imperfect or incorrect information to the science world. Significant issues are, therefore, inevitable in the characteristics of scientific studies in such disciplines and countries where the scholarly journals do not fulfill their functions. This study encompasses all scholarly journals published in Turkey in all fields of science and other disciplines. The reference questions in this study are grouped under three main categories: the contact and publication information, article evaluation, and publishing information. The number of journals and study totals 1,910.

Reliability is one of the fundamental criteria in engineering systems. Design and maintenance serve to support it throughout the systems life. As such, maintenance acts in parallel to production and can have a great impact on the availability and capacity of production and the quality of service. The authors describe current and innovative methods useful to industry and society.

Theoretical and Applied Mathematics in International Business

International Journal of Mathematical Combinatorics, Volume 4, 2013

Special Issue on Leonhard Paul Euler's: Functional Equations and Inequalities (F. E. I.)

Handbook of Research on Promoting Business Process Improvement Through Inventory Control Techniques

International Journal of Applied Mathematics and Physics

This paper presents a novel complex neutrosophic soft expert set (CNSES) concept. The range of values of CNSES is extended to the unit circle in the complex plane by adding an additional term called the phase term which describes CNSES's elements in terms of the time aspect.

This book analyzes the various semi-analytical and analytical methods for finding approximate and exact solutions of fractional order partial differential equations. It explores approximate and exact solutions obtained by various analytical methods for fractional order partial differential equations arising in physical models.

150 Sheets Of Premium Journal Paper. Excellent to keep focused in your studies and research to get good grades.

Neutrosophic Sets and Systems, Vol. 36, 2020

Modelling Rock Fracturing Processes

Systems Reliability Engineering

International Conference on Advances in Mathematical Sciences, Vellore, India, December 2017 - Volume II

Smarandache

The International J. Mathematical Combinatorics is a fully refereed international journal, sponsored by the MADIS of Chinese Academy of Sciences and published in USA quarterly, which publishes original research papers and survey articles in all aspects of mathematical combinatorics, Smarandache multi-spaces, Smarandache geometries, non-Euclidean geometry, topology and their applications to other sciences.

The goal of this book is to publish the latest mathematical techniques, research, and developments in engineering. This book includes a comprehensive range of mathematics applied in engineering areas for different tasks. Various mathematical tools, techniques, strategies, and methods in engineering applications are covered in each chapter. Mathematical techniques are the strength of engineering sciences and form the common foundation of all novel disciplines within the field. Advanced Mathematical Techniques in Engineering Sciences provides an ample range of mathematical tools and techniques applied across various fields of engineering sciences. Using this book, engineers will gain a greater understanding of the practical applications of mathematics in engineering sciences. Features Covers the mathematical techniques applied in engineering sciences Focuses on the latest research in the field of engineering applications Provides insights on an international and transnational scale Offers new studies and research in modeling and simulation

This book presents the state of the art in applied and industrial mathematics, updating the earlier Kluwer publication Applied and Industrial Mathematics, Venice-1, 1989. The current work includes a selection of main invited papers as well as conference contributions from a number of leading scientists working in the areas of applied mathematics, industrial mathematics and applied analysis, numerical mathematics, mathematical physics and applied probability. Audience: This volume will be of interest to researchers and advanced graduate students whose work involves mathematical modelling and industrial mathematics, numerics and computation, mathematics of science, mathematical physics, mathematical analysis in general and partial differential equations in particular.

Modeling and Performance Improvement

Applied Mathematics and Scientific Computing

The complex neutrosophic soft expert set and its application in decision making

Applied Mathematics and Computational Intelligence

International Journal of Applied Mathematical Analysis and Applications

The computing with Words (CW) is a well known soft computing method to find the solutions of many decision making problems in real life scenarios which consists of selective information used in natural language.

International Journal of Applied Mathematics and Engineering Sciences

Computational Science and Technology