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Altri autori (Persone)	PalMadhumangal MuhiuddinGhulam LiuPeide
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Nota di contenuto	Preface -- Fundamentals of Fuzzy Optimization and Decision-Making Problems -- What Is the Most Adequate Fuzzy Methodology? -- "How Measurement-Related Ideas Can Help Us Use Expert Knowledge When Making Decisions: Three Case Studies" -- "On Fusion of Soft and Hard Computing: Traditional ("Hard Computing") Optimal Rescaling Techniques Simplify Fuzzy Control" -- A novel fully interval-valued intuitionistic fuzzy multi-objective indefinite quadratic transportation

problem with an application to cost and wastage management in the food industry -- Project Management using Network Analysis in Fuzzy Environment -- Generalized Hukuhara Global Subdifferentiability in Interval Optimization Problems -- Applying the Max-Min Concept to a Transportation Problem in Hexagonal Fuzzy Numbers -- Development of an interval picture fuzzy matrix game-based approach to combat cyberthreats in the healthcare sector -- Minimization of span in  $L^1$ ;  $1^0$ -labeling for a particular type of intersection graphs -- Generalized neutrosophic sets and their applications for aggregated operators based on diagnostic disease problem -- An application of neutrosophic graph in decision-making problem for alliances of companies -- Dombi Hamy Mean Operators Based on Complex Intuitionistic Fuzzy Uncertainty and Their Application in Multi-Attribute Decision-Making -- Linear Diophantine fuzzy information aggregation with multi-criteria decision-making -- Hyperbolic Fuzzy TOPSIS Method for Multi-Criteria Decision Making problems -- Advanced TOPSIS based College Selection MCGDM problem in Trapezoidal Pythagorean fuzzy Environment -- Identification and Classification of Prioritized Aczel-Alsina Aggregation Operators Based on Complex Intuitionistic Fuzzy Information and Their Applications in Decision-Making Problem -- Intuitionistic Fuzzy Approach for Predicting Maternal Outcomes -- Study of Fuzzy Fractional Caputo Order Approach to Diabetes model -- Decision Analysis Framework Based on Information Measures of T-Spherical Fuzzy Sets -- New Methods of Computing Correlation Coefficient based on Pythagorean Fuzzy Information and their Applications in Disaster Control and Diagnostic Analysis -- Multi-criteria group decision making q-Rung neutrosophic interval valued soft set TOPSIS aggregating operator for the selection of diagnostic health imaging -- Cosine neutrosophic normal interval-valued aggregation operators to the selection of robotic engineering -- An integrated weighted distance based approximation method for interval-valued spherical fuzzy MAGDM -- Investigating Some Parameters of Cubic Fuzzy Graphs and an Application in Decision-Making Problem -- Imperfect Production Inventory System Considering Effects of Production Reliability -- A Fuzzy EOQ Model with Exponential Demand and Deterioration with Preservation Technology -- An EOQ Model with Price and Stock Dependent Demand Including Trade Credit using De-intuitification Technique under Triangular Intuitionistic Fuzzy Environment -- A Study of an EOQ Model under Triangular Cloudy Fuzzy Neutrosophic Demand Rate -- An application of Intuitionistic fuzzy differential equation to the inventory model -- Solution of the second-order linear Intuitionistic fuzzy difference equation by extension principle scheme -- The Probabilistic games and the Shapley function.

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## Sommario/riassunto

After developing fuzzy set theory, many contributors focused their research on the extension of fuzzy sets and their computational methodologies, strengthening modern science and technology. In some real-life phenomena, the conventional methods and traditional fuzzy sets cannot be explained, whereas the extension of fuzzy sets and effective new computing methods can explain it adequately. This edited book presents a new view of fuzzy set-measurement methods entitled "Fuzzy Optimization, Decision Making and Operations Research: Theory and Applications", which deals with different perspectives and areas of research. All chapters are divided into three parts: fuzzy optimization, fuzzy decision-making, and fuzzy operation research. The goal of this book is to provide a relevant methodological framework covering the core fields of fuzzy decision-making method, fuzzy optimization method, fuzzy graphics method, fuzzy operations research, fuzzy optimization using graph theory, fuzzy support systems and its real

and industrial applications. For many people, fuzzy words' industrial engineering and scientific meanings are still an advanced system for improving modern science and technology. Although fuzzy logic can be applied to many different areas, people do not know how different fuzzy approaches can be applied to various products currently on the market. It is written for professionals who wish to share their expertise, improve their findings, and provide relevant information in the fields of fuzzy methods and their application in decision-making, optimization theory, graph theory and operations research. This book is aimed at experts and practitioners in the fields of fuzzy optimization, fuzzy decision-making, and fuzzy operation research.

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