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- Intuitionistic Fuzzy Dependency Framework.- On the TOPSIS-class Methods in the Intuitionistic Fuzzy Environment.- Differential Evolution with Fuzzy Logic for Dynamic Adaptation of Parameters In Mathematical Function Optimization.- Recognizing Imbalanced Classes by an Intuitionistic Fuzzy Classifier.- Ensemble Neural Network with Type-1 and Type-2 Fuzzy Integration for Time Series Prediction and its Optimization with PSO.- Intuitionistic Fuzzy Logic and Provisional Acceptance of Scientific Theories: A Tribute to Krassimir Atanassov on the Occasion of his Sixtieth Birthday.- Intuitionistic Fuzzy Estimation of the Generalized nets Model of Spatial-temporal Group Scheduling Problems -- IT Business Service-Level-Management - An Intuitionistic Fuzzy Approach -- Modifications of the Algorithms for Transition Functioning in Gns, GNCP, IFGNCP1 and IFGNCP3 when Merging of Tokens is Permitted.- Generalized net model for monitoring the degree of disability in patients with multiple sclerosis based on neurophysiologic criteria.- Generalized Net Models of Basic Genetic Algorithm Operators.- Generalized Nets in Medicine. An Example of Telemedicine for People with Diabetes.

| Sommario/riassunto | The book offers a comprehensive and timely overview of advanced mathematical tools for both uncertainty analysis and modeling of parallel processes, with a special emphasis on intuitionistic fuzzy sets and generalized nets. The different chapters, written by active researchers in their respective areas, are structured to provide a coherent picture of this interdisciplinary yet still evolving field of science. They describe key tools and give practical insights into and research perspectives on the use of Atanassov's intuitionistic fuzzy sets and logic, and generalized nets for describing and dealing with uncertainty in different areas of science, technology and business, in a single, to date unique book. Here, readers find theoretical chapters, dealing with intuitionistic fuzzy operators, membership functions and algorithms, among other topics, as well as application-oriented chapters, reporting on the implementation of methods and relevant case studies in management science, the IT industry, medicine and/or education. With this book, the editors wish to pay homage to Professor Krassimir Todorov Atanassov for his pioneering work on both generalized nets and intuitionistic fuzzy set. |