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Granular Computing; 14 Wisdom Granular Computing; 15 Granular Computing for Reasoning about Ordered Data: The Dominance-Based Rough Set Approach; 16 A Unified Approach to Granulation of Knowledge and Granular Computing Based on Rough Mereology: A Survey
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 26 Design of Intelligent Systems with Interval Type-2 Fuzzy Logic 27 Theoretical Aspects of Shadowed Sets; 28 Fuzzy Representations of Spatial Relations for Spatial Reasoning; 29 Rough-Neural Methodologies in Granular Computing; 30 Approximation and Perception in Ethology-Based Reinforcement Learning; 31 Fuzzy Linear Programming; 32 A Fuzzy Regression Approach to Acquisition of Linguistic Rules; 33 Fuzzy Associative Memories and Their Relationship to Mathematical Morphology; 34 Fuzzy Cognitive Maps; Part Three Applications and Case Studies
 35 Rough Sets and Granular Computing in Behavioral Pattern Identification and Planning 36 Rough Sets and Granular Computing in Hierarchical Learning; 37 Outlier and Exception Analysis in Rough Sets and Granular Computing; 38 Information Access and Retrieval; 39 Granular Computing in Medical Informatics; 40 Eigen Fuzzy Sets and Image Information Retrieval; 41 Rough Sets and Granular Computing in Dealing with Missing Attribute Values; 42 Granular Computing in Machine Learning and Data Mining
 43 On Group Decision Making, Consensus Reaching, Voting, and Voting Paradoxes under Fuzzy Preferences and a Fuzzy Majority: A Survey and a Granulation Perspective

Sommario/riassunto

Although the notion is a relatively recent one, the notions and principles of Granular Computing (GrC) have appeared in a different guise in many related fields including granularity in Artificial Intelligence, interval computing, cluster analysis, quotient space theory and many others. Recent years have witnessed a renewed and expanding interest in the topic as it begins to play a key role in bioinformatics, e-commerce, machine learning, security, data mining and wireless mobile computing when it comes to the issues of effectiveness, robustness and uncertainty. The Handbook of Granular C