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Nota di contenuto	Chapter1: Introduction to possibility theory -- Chapter2: Fundamental possibilistic concepts -- Chapter3: Joint Possibility Distributions and Conditioning -- Chapter4: Possibilistic Similarity Measures -- Chapter5: The interrelated uncertainty modeling theories -- Chapter6: Possibility integral -- Chapter7: Fusion operators and decision-making criteria in the framework of possibility theory -- Chapter8: Possibilistic concepts applied to soft pattern classification -- Chapter9: The use of possibility theory in the design of information fusion systems.
Sommario/riassunto	This practical guidebook describes the basic concepts, the mathematical developments, and the engineering methodologies for exploiting possibility theory for the computer-based design of an

information fusion system where the goal is decision support for industries in smart ICT (information and communications technologies). This exploitation of possibility theory improves upon probability theory, complements Dempster-Shafer theory, and fills an important gap in this era of Big Data and Internet of Things. The book discusses fundamental possibilistic concepts: distribution, necessity measure, possibility measure, joint distribution, conditioning, distances, similarity measures, possibilistic decisions, fuzzy sets, fuzzy measures and integrals, and finally, the interrelated theories of uncertainty.. uncertainty. These topics form an essential tour of the mathematical tools needed for the latter chapters of the book. These chapters present applications related to decision-making and pattern recognition schemes, and finally, a concluding chapter on the use of possibility theory in the overall challenging design of an information fusion system. This book will appeal to researchers and professionals in the field of information fusion and analytics, information and knowledge processing, smart ICT, and decision support systems.