Record Nr. UNINA9910437925003321 Autore Gong Zaiwu Titolo Uncertain fuzzy preference relations and their applications / / Zaiwu Gong, Yi Lin, and Tianxiang Yao Berlin: New York, : Springer, c2013 Pubbl/distr/stampa 9783642284489 **ISBN** 3642284485 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (XIV, 210 p.) Collana Studies in fuzziness and soft computing, , 1434-9922; ; 281 LinYi <1959-> Altri autori (Persone) YaoTianxiang Disciplina 519.542 Soggetti Fuzzy decision making Fuzzy sets Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Relevant Theories of Reciprocal Preference and Fuzzy Preference Relations -- Complementary Preference Relations of Interval Fuzzy Numbers -- Complementary Preference Relations of Triangular Fuzzy Numbers -- Two-Tuple Linguistic Preference Relations -- Preference Relations of Trapezoidal Fuzzy Numbers -- Group Decision Making for Different Fuzzy Preference Relations -- Intuitionistic Fuzzy Preference Relations -- Conclusion. On the basis of fuzzy sets and some of their relevant generalizations, Sommario/riassunto this book systematically presents the fundamental principles and applications of group decision making under different scenarios of preference relations. By using intuitionistic knowledge as the field of discourse, this work investigates by utilizing innovative research means the fundamental principles and methods of group decision making with various different intuitionistic preferences: Mathematical reasoning is employed to study the consistency of group decision making; Methods of fusing information are applied to look at the aggregation of multiple preferences: Techniques of soft computing and optimization are utilized to search for satisfactory decision alternatives.

chapter follows the following structurally clear format of presentation:

literature review, development of basic theory, verification and

reasoning of principles, construction of models and computational schemes, and numerical examples, which cover such areas as technology, enterprise competitiveness, selection of airlines, experts decision making in weather-sensitive enterprises, etc. In terms of theoretical principles, this book can be used as a reference for researchers in the areas of management science, information science, systems engineering, operations research, and other relevant fields. It can also be employed as textbook for upper level undergraduate students and graduate students. In terms of applications, this book will be a good companion for all those decision makers in government, business, and technology areas.