

1. Record Nr.	UNINA9910484954903321
Autore	Lodwick Weldon A.
Titolo	Flexible and generalized uncertainty optimization : theory and approaches // Weldon A. Lodwick, Luiz L. Salles-Neto
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2021] Â©2021
ISBN	3-030-61180-9
Edizione	[Second edition.]
Descrizione fisica	1 online resource (IX, 193 p. 34 illus., 30 illus. in color.)
Collana	Studies in Computational Intelligence ; ; Volume 696
Disciplina	519.3
Soggetti	Mathematical optimization Uncertainty (Information theory) Fuzzy sets
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	An Introduction to Generalized Uncertainty Optimization -- Generalized Uncertainty Theory: A Language for Information Deficiency -- The Construction of Flexible and Generalized Uncertainty Optimization Input Data -- An Overview of Flexible and Generalized Uncertainty Optimization -- Flexible Optimization -- Generalized Uncertainty Optimization -- References. .
Sommario/riassunto	This book presents the theory and methods of flexible and generalized uncertainty optimization. Particularly, it describes the theory of generalized uncertainty in the context of optimization modeling. The book starts with an overview of flexible and generalized uncertainty optimization. It covers uncertainties that are both associated with lack of information and are more general than stochastic theory, where well-defined distributions are assumed. Starting from families of distributions that are enclosed by upper and lower functions, the book presents construction methods for obtaining flexible and generalized uncertainty input data that can be used in a flexible and generalized uncertainty optimization model. It then describes the development of the associated optimization model in detail. Written for graduate students and professionals in the broad field of optimization and operations research, this second edition has been revised and extended

to include more worked examples and a section on interval multi-objective mini-max regret theory along with its solution method.
