Record Nr. UNINA9910483129003321 Autore Pal Madhumangal Titolo Modern trends in fuzzy graph theory / / Madhumangal Pal, Sovan Samanta and Ganesh Ghorai Pubbl/distr/stampa Gateway East, Singapore: ,: Springer, , [2020] ©2020 **ISBN** 981-15-8803-1 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (XVI, 311 p. 123 illus., 14 illus. in color.) Disciplina 511.5 Graph theory Soggetti Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. 1. Fundamentals of Fuzzy Graphs -- 2. Fuzzy Planar Graphs -- 3. Fuzzy Nota di contenuto Competition Graphs -- 4. Fuzzy Threshold Graphs -- 5. Fuzzy Tolerance Graphs -- 6. Bipolar Fuzzy Graphs -- 7. Intuitionistic Fuzzy graphs -- 8. Interval-valued Fuzzy Graphs -- 9. Application of Fuzzy Graphs. This book provides an extensive set of tools for applying fuzzy Sommario/riassunto mathematics and graph theory to real-life problems. Balancing the basics and latest developments in fuzzy graph theory, this book starts with existing fundamental theories such as connectivity, isomorphism, products of fuzzy graphs, and different types of paths and arcs in fuzzy graphs to focus on advanced concepts such as planarity in fuzzy graphs, fuzzy competition graphs, fuzzy threshold graphs, fuzzy tolerance graphs, fuzzy trees, coloring in fuzzy graphs, bipolar fuzzy graphs, intuitionistic fuzzy graphs, m-polar fuzzy graphs, applications of fuzzy graphs, and more. Each chapter includes a number of key representative applications of the discussed concept. An authoritative, self-contained, and inspiring read on the theory and modern applications of fuzzy graphs, this book is of value to advanced undergraduate and graduate students of mathematics, engineering,

and computer science, as well as researchers interested in new

developments in fuzzy logic and applied mathematics.