Record Nr. UNINA9910483863903321 Autore Mordeson John N Titolo Advanced Topics in Fuzzy Graph Theory / / by John N. Mordeson, Sunil Mathew Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2019 **ISBN** 3-030-04215-4 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (XV, 209 p. 73 illus., 2 illus. in color.) Collana Studies in Fuzziness and Soft Computing, , 1434-9922; ; 375 511.5 Disciplina Soggetti Computational intelligence Graph theory Artificial intelligence Game theory Computational Intelligence **Graph Theory** Artificial Intelligence Game Theory, Economics, Social and Behav. Sciences Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Preliminaries -- Connectivity in Fuzzy Graphs -- Connectivity and Nota di contenuto Wiener Indices of Fuzzy Graphs -- Distances and Convexity in Fuzzy Graphs -- Aggregation Operators and t-Norm Fuzzy Graphs --Dialectic Synthesis. This book builds on two recently published books by the same authors Sommario/riassunto on fuzzy graph theory. Continuing in their tradition, it provides readers with an extensive set of tools for applying fuzzy mathematics and graph theory to social problems such as human trafficking and illegal immigration. Further, it especially focuses on advanced concepts such as connectivity and Wiener indices in fuzzy graphs, distance, operations on fuzzy graphs involving t-norms, and the application of dialectic synthesis in fuzzy graph theory. Each chapter also discusses a number of key, representative applications. Given its approach, the book provides readers with an authoritative, self-contained guide to – and at

the same time an inspiring read on - the theory and modern

applications of fuzzy graphs. For newcomers, the book also includes a brief introduction to fuzzy sets, fuzzy relations and fuzzy graphs.