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	Sommario/riassunto	Combinatorial optimization is a fascinating topic. Combinatorial optimization problems arise in a wide variety of important fields such as transportation, telecommunications, computer networking, location, planning, distribution problems, etc. Important and significant results have been obtained on the theory, algorithms and applications over the last few decades. In combinatorial optimization, many network design problems can be generalized in a natural way by considering a related problem on a clustered graph, where the original problem's feasibility

constraints are expressed in terms of the clusters, i.e., node sets instead of individual nodes. This class of problems is usually referred to as generalized network design problems (GNDPs) or generalized combinatorial optimization problems. The express purpose of this monograph is to describe a series of mathematical models, methods, propositions, algorithms developed in the last years on generalized network design problems in a unified manner. The book consists of seven chapters, where in addition to an introductory chapter, the following generalized network design problems are formulated and examined: the generalized minimum spanning tree problem, the generalized traveling salesman problem, the railway traveling salesman problem, the generalized vehicle routing problem, the generalized fixed-charge network design problem and the generalized minimum vertex-biconnected network problem. The book will be useful for researchers, practitioners, and graduate students in operations research, optimization, applied mathematics and computer science. Due to the substantial practical importance of some presented problems, researchers in other areas will find this book useful, too.