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Collana	Vector Optimization, , 1867-898X
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Soggetti	Operations research Mathematical optimization Econometrics Calculus of variations Social sciences - Mathematics Operations Research and Decision Theory Optimization Quantitative Economics Calculus of Variations and Optimization Continuous Optimization Mathematics in Business, Economics and Finance
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Nota di contenuto	Introduction -- Sets and Binary Relations -- Extended Real-Valued Functions -- Translation Invariant Functions -- Minimizers of Translation Invariant Functions -- Vector Optimization in General Spaces -- Multiobjective Optimization -- Variational Analysis -- Special Cases and Functionals Related to A,k -- Set-Valued Optimization Problems -- Vector Optimization With Variable Domination Structures -- Variational Methods in Topological Vector Spaces -- Algorithms for the Solution of Optimization Problems -- Optimization Under Uncertainty -- Further Applications. .
Sommario/riassunto	Like norms, translation invariant functions are a natural and powerful

tool for the separation of sets and scalarization. This book provides an extensive foundation for their application. It presents in a unified way new results as well as results which are scattered throughout the literature. The functions are defined on linear spaces and can be applied to nonconvex problems. Fundamental theorems for the function class are proved, with implications for arbitrary extended real-valued functions. The scope of applications is illustrated by chapters related to vector optimization, set-valued optimization, and optimization under uncertainty, by fundamental statements in nonlinear functional analysis and by examples from mathematical finance as well as from consumer and production theory. The book is written for students and researchers in mathematics and mathematical economics. Engineers and researchers from other disciplines can benefit from the applications, for example from scalarization methods for multiobjective optimization and optimal control problems.