Wang, Wenyi; Gao, Ying; Liu, Fuping
The equivalent representation of co-radiant sets and its application in multi-objective optimization problems. (Chinese. English summary) Zbl 07404511
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Summary: As special abstract convex (concave) sets, radiant sets and co-radiant sets play important roles in abstract convex analysis and the theory of multi-objective optimization problems. First, an equivalent characterization of the radiant sets and co-radiant sets is established to derive their important properties. Then, these important properties are applied to the characterization of approximate solutions of vector optimization problems, and the equivalent characterization of approximate solution sets is obtained.

MSC:
90C29 Multi-objective and goal programming
90C46 Optimality conditions and duality in mathematical programming

Keywords:
co-radiant sets; radiant sets; equivalent representations; vector optimization problems; approximate solutions

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