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Interactive multiobjective tabu/scatter search based on reference point.  (Spanish. English summary)  Zbl 1316.90039  

Summary: Multiobjective tabu/scatter search architecture with preference information based on reference points for problems of continuous nature. Features of this new version are: its interactive behavior, its deterministic approximation to Pareto-optimality solutions near the reference point, and the possibility to change progressively the reference point to explore different preference regions. The approach does not impose any restrictions with respect to the location of the reference points in the objective space. On 2-objective to 10-objective optimization test problems the modified approach shows its efficacy and efficiency to find an adequate non-dominated set of solutions in the preferred region.

MSC:
90C27  Combinatorial optimization

Keywords:
multiple objectives; metaheuristics; reference point; continuous optimization

Full Text: DOI