

عنوان مقاله:

A Two-Stage Green Supply Chain Network with a Carbon Emission Price by a Multi-objective Interior Search Algorithm

محل انتشار:

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خلاصه مقاله:

This paper presented a new two-stage green supply chain network, in which includes two innovations. Firstly, it presents a new multi-objective model for a two-stage green supply chain problem that considers the amount of shortage in the network, reworking, and carbon-trading cost produced in the green supply chain. Secondly, because of the complexity of this model, it uses a new multi-objective interior search algorithm (MOISA) to solve the presented model. The obtained results of the proposed algorithm were compared with the results of other multi-objective meta-heuristics, namely MOPSO, SPEA2, and NSGA-II. The outcomes demonstrate that the proposed MOISA gives better Pareto solutions and indicates the superiority of the proposed algorithm in most cases. This paper presented a new two-stage green supply chain network, in which includes two innovations. Firstly, it presents a new multi-objective model for a two-stage green supply chain problem that considers the amount of shortage in the network, reworking, and carbon-trading cost produced in the green supply chain. Secondly, because of the complexity of this model, it uses a new multi-objective interior search algorithm (MOISA) to solve the presented model. The obtained results of the proposed algorithm were compared with the results of other complexity of this model, it uses a new multi-objective interior search algorithm (MOISA) to solve the presented model. The obtained results of the proposed algorithm were compared with the results of other multi-objective meta-heuristics, namely MOPSO, SPEA2, and NSGA-II. The outcomes demonstrate that the proposed MOISA gives better Pareto solutions and indicates the superiority of other multi-objective meta-heuristics, namely MOPSO, SPEA2, and NSGA-II. The outcomes demonstrate that the proposed MOISA gives better Pareto solutions and indicates the superiority of the proposed algorithm in most cases

کلمات کلیدی:

Green Supply Chain Network, Multi-Objective Optimization, Carbon Price, Interior search algorithm, meta-heuristic algorithm

لینک ثابت مقاله در پایگاه سیویلیکا:





