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A Survey about Multi-Objective Optimization for Green Vehicle Routing Problems

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Abstract

This article presents a survey about multi-objective optimization for green vehicle routing problems (MOOGVRP), that is, with environmental considerations. It makes use of a taxonomy that divides the MOOGVRP in: Green VRP, Pollution Routing Problem (PRP) and VRP in Reverse Logistics (VRPRL). The goal of the present paper is to detect the gaps in the literature that make possible some advances related to MOOGVRP. For this, this research approaches, briefly, the following topics: bibliometric data; taxonomy; main variations of the VRP used; proposed objective functions; number of objectives; solution procedures; main softwares and languages for implementation; the most cited works of the sample and their approaches.

Keywords: *Survey; Green Vehicle Routing Problem; Pollution Routing Problem; Vehicle Routing Problem in Reverse Logistic; Multi-objective Optimization.*