

博士论坛

## 多式联运运输问题的混合遗传算法

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**摘要** 多式联运运输方式的选择关系到货物运输所需费用、时间等。该文对需经过多式联运过程的运输问题进行了研究。首先分析了多式联运运输问题的数学模型; 其次通过引入关于运输量及运输方式的混合编码, 结合两种混合遗传算子, 提出了一种求解多式联运运输问题的混合遗传算法; 最后用数值例子对算法的有效性进行了验证。

**关键词** [多式联运](#) [运输问题](#) [混合遗传算法](#)

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## Hybrid genetic algorithm for transportation problem with multimodal transport

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### Abstract

Transportation modes selection in multimodal transportation influences the freightage cost and time et al. This paper studies the transportation problem with the form of multimodal transport. Firstly, the mathematic model for transportation problem with multimodal transport is analyzed; Secondly, a hybrid genetic algorithm for transportation problem with multimodal transport is presented by introducing a form of hybrid chromosome coding, which considers both transportation quantity and transportation modes, and two hybrid genetic operators. To illustrate the algorithm, numerical example is presented.

**Key words** [multimodal transport](#) [transportation problem](#) [hybrid genetic algorithm](#)

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