

## عنوان مقاله:

A Fixed Charge Transportation Problem with Fuzzy Shipping Costs

## محل انتشار:

چهاردهمین کنفرانس سیستم های فازی ایران (سال: 1394)

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## خلاصه مقاله:

This paper considers a Fixed Charge Transportation Problem with fuzzy shipping costs. Whereas the shipping costs of routes are fuzzy intervals, with increasing linear membership functions, fixed costs, supplies and demands are deterministic numbers. By defining a membership function, associated with the objective values and utilizing the Bellman-Zadeh's max-min criterion, instead of the main problem, a new crisp nonlinear mixed-integer programming problem is formulated. To solve this non-linear programming problem, at first, we find optimality conditions for a feasible solution, then, using these optimality conditions, reformulate the non-linear programming problem as a linear mixedinteger fractional programming problem, and finally transformed the fractional programming problem as a mixed-integer linear programming problem, which can be solved using the existence methods. An illustrative example is solved, to explain the presented details

## کلمات کلیدی:

Fixed charge transportation; Fuzzy shipping cost; Max-Min criterion; Mixed-integer programming; Fractional programming

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/730795>

