

## عنوان مقاله:

A Hybrid Grey-Based Two-Step Clustering and Firefly Algorithm for Portfolio Selection

## محل انتشار:

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## خلاصه مقاله:

Considering the concept of clustering, the main idea of the present study is based on the fact that all stocks for choosing and ranking will not be necessarily in one cluster. Taking the mentioned point into account, this study aims at offering a new methodology for making decisions concerning the formation of a portfolio of stocks in the stock market. To meet this end, Multiple-Criteria Decision-Making, Data Mining, and Multi-objective Optimization were employed. First, candidate stocks were clustered using two-step clustering method. Available stocks in each cluster were independently ranked using grey relational analysis. Firefly algorithm was employed for Pareto analysis of risk and ranking. The results of clustering in the stocks revealed that all candidate stocks were not placed in one cluster. The results of robustness analysis employed in ranking method verified the accuracy of calculations in the grey relational analysis through stock repetition of candidates in each cluster.

## کلمات کلیدی:

Firefly algorithm, Grey relational analysis, Multiple-criteria decision-making, Portfolio optimization, Two-step clustering

## لینک ثابت مقاله در پایگاه سیویلیکا:

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