

## عنوان مقاله:

Improved Parallel Chaos Optimization Algorithm With the Number of Variables Reduced

## محل انتشار:

ششمین کنفرانس مهندسی برق و الکترونیک ایران (سال: 1393)

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## خلاصه مقاله:

Chaos optimization algorithms almost are based on Logistic map. However, we know that the probability density function of the chaotic sequences derived from Logistic map is not uniform, which affects the global searching capacity of chaos optimization algorithms. So we use the improved Logistic map for generating chaos variables to have a better search in the search space. Results show that, the running time of this algorithm reduced greatly. In this algorithm, several chaos variables search in the search space at first. Then with reducing the search space and the number of chaos variables according to the result achieved from the search steps, we improve the speed of running time. After that, continue to search in the search space reduced and repeat the steps above until find the global optimal point. The results of test functions demonstrate that this algorithm has better optimization performance compared with the method of Parallel Chaos Optimization Algorithm with the Number of Variables Reduced.

## کلمات کلیدی:

parallel chaos optimization algorithm; logistic map; global optimal point; search space

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/384022>

