

## عنوان مقاله:

WEIGHT OPTIMIZATION OF TRUSS STRUCTURES USING WATER CYCLE ALGORITHM

## محل انتشار:

مجله بهینه سازی در مهندسی عمران، دوره 3، شماره 1 (سال: 1391)

تعداد صفحات اصل مقاله: 15

## نویسندگان:

H. Eskandar

A. Sadollah

A. Bahreininejad

## خلاصه مقاله:

Water cycle algorithm (WCA) is a new metaheuristic algorithm which the fundamental concepts of WCA are derived from nature and are based on the observation of water cycle process and how rivers and streams flow to sea in the real world. In this paper, the task of sizing optimization of truss structures including discrete and continues variables carried out using WCA, and the optimization results were compared with other well-known optimizers. The obtained statistical results show that the WCA is able to provide faster convergence rate and also manages to achieve better optimal solutions compared to other efficient optimizers.

## کلمات کلیدی:

water cycle algorithm; truss structures, sizing optimization; metaheuristics; constraint optimization

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1831508>

