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## عنوان مقاله:

Shape and size optimization of truss structures using genetic algorithm

**محل ائتشار:** چهارمین کنفرانس بین المللی مقاوم سازی (سال: 1391)

تعداد صفحات اصل مقاله: 1

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## خلاصه مقاله:

Optimizing of structures in civil engineering will be observed if designing will be technical and implementation cost will be affordable. On the other hand ,according to different application of trusses in construction projects and importance of lightening, always appropriate methods have been considered by the engineers these days. Optimizing of truss structures by genetic algorithm was first introduced in 1386. In the past, to optimize the size, shape and topology of two-dimensional and three-dimensional trusses, both classical method of forces and genetic algorithm was used to optimize truss structures. However, different criteria can be considered, but usually various criteria are influenced by one of them. In other words, with the optimization of those criteria, others are being pushed towards its optimal state. In truss structures you deal with a series of bars, for this case almost all design parameters of truss. In this article, in addition to observing possible states for determining the optimization of trusses, also tried to get a minimum weight .structure that can provide all predicted design constraints

## کلمات کلیدی:

Truss, Genetic algorithm, Optimization of structure, Lightening

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