

عنوان مقاله:

Optimum Design of Truss-Structures Using Gravitational Particle Swarm Optimization

محل انتشار:

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خلاصه مقاله:

In this paper, gravitational particle swarm (GPS) optimization has been developed for optimization of truss-structures. The objective of the optimization is to minimize the total weight of the structure subjected to material and performance constraints in the form of stress and deflection limits. GPS is used to investigate the spatial truss structures with discrete variables. GPS agents update their respective positions with PSO velocity and GSA acceleration. The examples are widely reported and used in the related literature as benchmark truss-structures. The results show that the algorithms performed better than other methods in most of the cases.

کلمات کلیدی:

optimization, gravitational particle swarm, truss-structures

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