

## عنوان مقاله:

KOLMOGOROV-SMIRNOV TEST TO TACKLE FAIR COMPARISON OF HEURISTIC APPROACHES IN  
STRUCTURAL OPTIMIZATION

## محل انتشار:

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## خلاصه مقاله:

This paper provides a test method to make a fair comparison between different heuristics in structure optimization. When statistical methods are applied to the structural optimization (namely heuristics or meta-heuristics with several tunable parameters and starting seeds), the "one problem - one result" is extremely far from the fair comparison. From statistical point of view, the minimal requirement is a so-called "small-sample" according to the fundamental elements of the theory of the experimental design and evaluation and the protocol used in the drug development processes. The viability and efficiency of the proposed statistically correct methodology is demonstrated using the well-known .ten-bar truss on a set of the heuristics from the brutal-force-search up to the most sophisticated hybrid approaches

## کلمات کلیدی:

Statistical comparison; Kolmogorov-Smirnov test; Heuristics; Meta-heuristics; Structural optimization

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1831190>

