عنوان مقاله:

Optimizing a Flexible Manufacturing System: Hybrid Metaheuristic Approaches

محل انتشار:

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خلاصه مقاله:

In this Paper, the hybrid Genetic algorithm (GA) with Simulated Annealing algorithm (SA) & hybrid Imperialist Competitive algorithm (ICA) with Simulated Annealing algorithm (SA) are developed for classical Flexible Job Shop Scheduling Problem (FJSP). GA is one of the population-based stochastic algorithms and ICA is an algorithm for optimization which is inspired by the imperialistic competition. In order To assess the performance of mentioned algorithms, the results are compared with literature. Finally, for evaluating the distinctions of the two algorithms much more elaborately, they are compared with each other in Cmax (Makespan), Mean and elapsed time for solving the problem and statistical analysis of the results are done.

کلمات کلیدی:

Flexible Job Shop Scheduling Problem, Genetic Algorithm, Imperialist Competitive Algorithm

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