

Ouyang, Aijia; Zhou, Guo; Zhou, Yongquan

A self-adaptive immune PSO algorithm for constrained optimization problems. (English)

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Summary: This paper proposes a new adaptive immune particle swarm optimization (AIA-PSO) algorithm, which can solve nonlinear constraints optimization problems. Eight common benchmark functions and three practical examples show that the AIA-PSO algorithm is effective and practical.

For the entire collection see [Zbl 1201.68002].

MSC:

90C59 Approximation methods and heuristics in mathematical programming

90C30 Nonlinear programming

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adaptation; immune algorithm; PSO; constrained-optimization

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