
A Study of the Application of Chaos to the Global Optimization.

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Abstract

In this communication we undertake a performance analysis for a new class of evolutionary algorithms called chaos optimization algorithm (COA), recently proposed by Caponetto and al. [1], [2], [3]. It was originally proposed to solve nonlinear optimization problems with bounded variables. Different chaotic mapping have been considered, combined with several working strategy. In this work, a chaotic strategy is proposed based on a new two-dimensional discrete chaotic attractor. Experiments results showed that the proposed algorithm can achieve good performance.

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