Moth–flame optimization algorithm: variants and applications

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This paper thoroughly presents a comprehensive review of the so-called moth–flame optimization (MFO) and analyzes its main characteristics. MFO is considered one of the promising metaheuristic algorithms and successfully applied in various optimization problems in a wide range of fields, such as power and energy systems, economic dispatch, engineering design, image processing and medical applications. This manuscript describes the available literature on MFO, including its variants and hybridization, the growth of MFO publications, MFO application areas, theoretical analysis and comparisons of MFO with other algorithms. Conclusions focus on the current work on MFO, highlight its weaknesses, and suggest possible future research directions. Researchers and practitioners of MFO belonging to different fields, like the domains of optimization, medical, engineering, clustering and data mining, among others will benefit from this study.

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