Special Issue

Bio-Inspired Optimization Algorithms and Designs for Engineering Applications

Message from the Guest Editors

With the development in industrialization, engineering applications are becoming more and more frequent. Thereby, wide and various engineering problems come with it. To solve these complex real-world problems, a host of optimization algorithms are proposed, and bioinspired optimization algorithms account for a large proportion. Numerous literature shows that bio-inspired optimization algorithms with the capability of rapidly converging and escaping from local optimal could solve complex problems, such as non-convex, nonlinear constraints, and high-dimensional problems. Due to the sufficient performance of these optimization algorithms, through an exploration and exploitation process, accurate and adequate results can eventually be produced at a small cost. The purpose of this Special Issue is to capture recent contributions of high-quality papers focusing on interdisciplinary research on the optimization algorithm for engineering applications using methods that inspired by the dynamic and intelligent conducts of creatures, such as hunting, mating, and other social behaviors.

Guest Editors

Prof. Dr. Heming Jia

Dr. Laith Abualigah

Prof. Dr. Xuewen Xia

Deadline for manuscript submissions

closed (30 September 2023)



an Open Access Journal by MDPI

Impact Factor 3.9
CiteScore 4.2
Indexed in PubMed



mdpi.com/si/166767

Biomimetics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomimetics@mdpi.com

mdpi.com/journal/biomimetics





an Open Access Journal by MDPI

Impact Factor 3.9 CiteScore 4.2 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Stanislav N. Gorb

Department of Functional Morphology and Biomechanics, Zoological Institute, Kiel University, 24118 Kiel, Germany

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q2 (Biomedical Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.1 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2025).

