

Special Issue

Fractal and Fractional Analysis in Biomedical Sciences and Engineering

Message from the Guest Editor

This Special Issue aims to offer an overview of state-of-the-art developments in the field of fractal and fractional-based methodologies as applied to the analysis and modeling of biomedical entities and processes, as well as developments in biomedical engineering. The vision of this Special Issue encompasses the most relevant developments in using novel approaches in life sciences, successfully published 10 interesting papers. The topics of interest include, but are not limited to, the following:

- Fractal and multifractal processes in living organisms/in vitro models;
- Fractal and fractional approaches in disease development and treatment modeling;
- Fractal operators and fractional dynamics as applied to life sciences;
- Numerical schemes for computational biology;
- Imaging technologies and medical image analysis and interpretation;
- Machine learning and artificial intelligence applied to biomedical problems;
- Fractional-order or integer-order neural networks and graph theory approaches;
- Neuronal models and brain networks in health and disease.

Guest Editor

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Deadline for manuscript submissions

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About the Journal

Message from the Editor-in-Chief

Fractal and Fractional (*Fractal Fract.*) is a scholarly online journal which provides a forum for discussion on new original models and methods in fractals and fractional calculus both from theory and applications. It is a peer-reviewed, open access journal that publishes high quality original research articles, review papers and short communications.

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Author Benefits

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Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 19.3 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).