

Special Issue

Fractal and Fractional Analysis in Biomedical Sciences and Engineering, 2nd Edition

Message from the Guest Editors

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. Volume 1 successfully published 10 interested papers in this field. The vision of volume 2 continues to encompass the most relevant developments in using novel approaches in life sciences. 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.

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Deadline for manuscript submissions

30 December 2026



Fractal and Fractional

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 6.0



mdpi.com/si/240061

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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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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).