

## 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.

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### Guest Editor

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### Deadline for manuscript submissions

closed (25 December 2024)



## Fractal and Fractional

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Impact Factor 3.3  
CiteScore 6.0



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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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### Editor-in-Chief

Prof. Dr. Carlo Cattani

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### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, and other databases.

#### Journal Rank:

JCR - Q1 (Mathematics, Interdisciplinary Applications) /  
CiteScore - Q1 (Analysis)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 19.9 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).