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-ofthe-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.

Guest Editors

Dr. Andjelija Ž. Ilić

Institute of Physics Belgrade, University of Belgrade, Pregrevica 118, 11080 Zemun-Belgrade, Serbia

Dr. Corina S Drapaca

Department of Engineering Science and Mechanics, The Pennsylvania State University, University Park, PA 16802, USA

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Fractal and Fractional Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 fractalfract@mdpi.com

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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.

Editor-in-Chief

Prof. Dr. Carlo Cattani

Engineering School (DEIM), University of Tuscia, Largo dell'Università, 01100 Viterbo, Italy

Author Benefits

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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).

