

## Special Issue

# Modeling, Simulation and Applications of Fractal/Fractional Calculus to Engineering Materials

### Message from the Guest Editors

This Special Issue seeks to showcase cutting-edge advancements in constitutive modeling through fractal and fractional calculus, along with their engineering applications. We invite high-quality contributions across various formats, including review articles, original research papers, and technical notes. Relevant topics encompass, but are not limited to, the following:

- Constitutive modeling based on fractal/fractional calculus;
- Theoretical developments in generalized fractional/fractal operators;
- Advanced numerical algorithms for fractional differential equations;
- Multiscale modeling applications of fractal/fractional approaches;
- Applications of fractional models in dynamic analyses;
- Application AI to fractional/fractal systems.

---

### Guest Editors

Dr. Wei Cai

Dr. Xianglong Su

Prof. Dr. Wojciech Sumelka

---

### Deadline for manuscript submissions

31 January 2026



## Fractal and Fractional

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 6.0



[mdpi.com/si/242246](https://mdpi.com/si/242246)

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

[mdpi.com/journal/  
fractalfract](https://mdpi.com/journal/fractalfract)





# Fractal and Fractional

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 6.0



[mdpi.com/journal/  
fractalfract](https://mdpi.com/journal/fractalfract)



## 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

#### 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).