Special Issue

Advances in Dynamics and Control of Fractional-Order Systems

Message from the Guest Editor

The focus of this Special Issue is to continue to advance research on topics relating to the modeling, dynamic analysis, control, and application of fractional-order systems. Topics that are invited for submission include (but are not limited to) the following:

- Resonance, bifurcation, and chaotic behavior in fractional-order systems;
- Resonance analysis and stability analysis of fractionalorder systems;
- Nonlinear dynamics of fractional-order systems;
- Uncertain fractional-order system;
- Adaptive control of fractional-order systems;
- Backstepping control of fractional-order systems;
- Model predictive control for fractional-order systems;
- Intelligent control of fractional-order systems;
- Fractional-order optimization;
- System identification for fractional-order models.

Guest Editor

Dr. Ruihong Li

School of Mathematics and Statistics, Xidian University, Xi'an, China

Deadline for manuscript submissions

31 July 2026



Fractal and Fractional

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 6.0



mdpi.com/si/222985

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

mdpi.com/journal/ fractalfract





Fractal and Fractional

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 6.0



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).

