

Special Issue

Caputo Fractional Difference Equations and Its Applications

Message from the Guest Editors

This Special Issue aims to highlight the latest developments in the theory and applications of Caputo fractional difference equations. We invite researchers to contribute original research articles, reviews, and case studies on topics including, but not limited to, the following:

- Theoretical aspects of Caputo fractional difference equations.
- Numerical methods and computational techniques for solving fractional difference equations.
- Caputo Fractional difference equations in mathematical modeling.
- Caputo Fractional difference equations in physics, biology, and engineering.
- Caputo Fractional difference equations in finance and economics.
- Caputo Fractional difference equations in signal processing and control.
- Existence and uniqueness results for solutions of Caputo fractional difference equations.
- Stability analysis and bifurcation theory for Caputo fractional difference equations.
- Caputo Fractional difference equations with applications in image processing and data analysis.
- Caputo Fractional difference equations in optimization and machine learning.

Guest Editors

Dr. Churong Chen

1. School of Mathematics and Systems Science, Guangdong Polytechnic Normal University, Guangzhou 510665, China

2. Department of Mathematics, Center for Dynamics, Technische Universität Dresden, 01069 Dresden, Germany

Dr. Dorota Mozyrska

Faculty of Computer Science, Bialystok University of Technology, Wiejska 45A, 15-351 Bialystok, Poland

Deadline for manuscript submissions

closed (30 July 2024)



Fractal and Fractional

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 6.0



mdpi.com/si/194242

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