

Special Issue

Recent Advances in Fractional-Order Equations and Their Applications in Modern Energy Systems

Message from the Guest Editors

The purpose of this Special Issue is to continue to provide a platform to share the insights, findings, and experiences in utilizing fractional-order equations to address the challenges and opportunities in modern energy systems. Topics that are invited for submission may include, but are not limited to, the following: Fractional-order control theory in modern energy systems;

Theoretical frameworks and foundations of fractional-order equations in modern energy systems;

Fractional-order modeling and analysis of modern energy systems;

Fractional-order control systems and implementation of modern energy systems;

Applications of fractional-order equations in renewable energy sources;

Fractional-order control and optimization of energy systems;

Fractional-order dynamics in energy storage and energy conversion systems;

Case studies and implementations of fractional-order models in energy systems;

Energy storage systems, supercapacitors and batteries, and hybrid energy storage.

Guest Editors

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Deadline for manuscript submissions

closed (15 July 2025)



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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

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Author Benefits

High Visibility:

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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).