Special Issue

Applications of Fractional-Order Grey Models

Message from the Guest Editors

Fractional-order grey systems refers to a class of emerging theories that incorporate concepts from fractional-order calculus into the establishment of grey models. Compared with traditional grey models, the fractional-order grey models have stronger stability, higher flexibility and wider application prospects. They can be further divided into fractional-order accumulating grey models and fractional-order derivative grey models. Fractional grey models have been widely used in various fields such as agriculture, industry, society, economy, management, transportation, and energy, and relevant achievements are constantly emerging.

Topics that are invited for submission include (but are not limited to):

Fractional-order grey modelling algorithm;
Fractional-order grey model theory improvements;
Applications of fractional-order grey models for energy consumption, traffic flow, air quality, natural disasters;
Applications of fractional-order grey models in agriculture, settlement prediction, supply chains;

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Deadline for manuscript submissions

closed (14 March 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.

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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).

