Special Issue

Fractional-Order System: Control Theory and Applications

Message from the Guest Editors

In the last two decades, fractional differential equations have been used more frequently in physics, signal processing, fluid mechanics, viscoelasticity, mathematical biology, electrochemistry, and many other fields, opening a new and more realistic way to capture memory-dependent phenomena and irregularities inside systems using more sophisticated mathematical analysis. The focus of this Special Issue is to continue to advance research on topics relating to fractional-order control theory and its applications to practical systems modeled using fractional-order differential equations. Topics that are invited for submission include (but are not limited to):

- Fractional-order control theory for fractional-order systems;
- Fractional-order control theory for integer-order systems;
- Digital implementation of fractional-order control;
- New physical interpretation of fractional-order operators and their relationship to control design;
- Verification and reachability analysis of fractional-order differential equations;
- Etc.

Guest Editors

Dr. Thach Ngoc Dinh

Dr. Shyam Kamal

Dr. Rajesh Kumar Pandey

Deadline for manuscript submissions

closed (31 July 2022)

Fractal and Fractional

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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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).