

## Special Issue

# Fractional-Order Circuits, Systems, and Signal Processing

### Message from the Guest Editors

Fractional calculus is the branch of mathematics that generalizes the operations of classical calculus. The dynamics of real-world systems can be more effectively captured using the concepts of fractional calculus compared to classical calculus-based models. This is due to the additional degrees-of-freedom (extra 'tuning knobs') available in a fractional-order transfer function, which, in turn, enhances the design flexibility. The application of numerical approximation methods has resulted in effective fractional-order systems for various engineering disciplines, such as linear and non-linear circuit theory, signal processing, biomedicine, control theory, etc. In recent years, optimization (both classical and metaheuristic) techniques have also been exploited by researchers to obtain robust fractional-order models. The focus of this Special Issue is to further advance the theory, design, realization, and application domain of fractional-order systems.

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### Guest Editors

Dr. Norbert Herencsar

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Prof. Dr. Esteban Tlelo-Cuautle

Prof. Dr. Dumitru Baleanu

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### Deadline for manuscript submissions

closed (30 April 2023)



## Fractal and Fractional

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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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### Editor-in-Chief

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