

Special Issue

Modern Mathematical Theories in Electromagnetism: Fractals, Wavelets and Fractional Operators

Message from the Guest Editor

In this Special Issue, we invite and welcome review, expository, and original papers dealing with recent advances in the application of fractal geometry, wavelet analysis, and fractional calculus in electromagnetism. From a more general point of view, we also invite all theoretical and practical investigations in physics and engineering focused on this topic. The main topics of this Special Issue include (but are not limited to) the following:

- Wavelet electromagnetism.
- Scattering.
- Fractal antennae.
- Fractional electromagnetism.
- Fractal-wavelet models and electromagnetic radiation.
- Fractional Laplacians in electromagnetism.
- Fractional PDEs in electromagnetism.
- Geometrical configurations in electromagnetic problems.
- Fractional calculus in remote sensing.

Dr. Waldo Arriagada

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closed (31 March 2023)



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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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Author Benefits

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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).