

Special Issue

Fractional Dynamics: Theory and Applications

Message from the Guest Editor

Investigation of random processes in complex media has been attracting plenty of attention for years. Theoretical modeling of diffusion in heterogeneous and disordered media takes considerable part of these studies. Heterogeneous and disordered materials include various materials with defects, multi-scale amorphous composites, fractal and sparse structures, weighted graphs, and networks. Diffusion in such media with geometric constraints and random forces is often anomalous and is described by fractional calculus. Further development of the theoretical modeling of these random processes in a variety of realizations in physics, biology, social sciences, and finance is an essential part of modern studies, what we called complex systems. The purpose of the Special Issue is to reflect current situation in fractional dynamics theory, and to collect various models for the description of anomalous diffusion and random walks in complex systems. We kindly invite researchers working in these fields to contribute with original research/review papers dedicated to theoretical modeling and applications.

Guest Editor

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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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