Special Issue

q-Fractional Calculus/Differential Equations and Related Applications

Message from the Guest Editors

Fractional differential equations, including quantum numbers, refer to the field of mathematics that finds applicability by modeling and designing concepts primarily employed in chemistry, mechanics, physics, and engineering. In addition, q-fractional difference calculus provides novel concepts by combining theories related to quantum numbers with the theory of classical calculus. Furthermore, q-calculus has further utility in quantum mechanics, where it maintains close relationships with commutativity relations and Lie algebras. The aim of this Special Issue is present an overview of advanced research on quantum fractional differential equations, difference equations and computation, and improvements, extensions and generalizations to classical mathematical analysis, as well as related topics and applications. There are some keywords for this Special Issue:
foundations of fractional analysis;
fractional-order derivatives and integrals;
fractional transforms;
special functions; quantum calculus;
linear and nonlinear fractional analysis;
q-fractional differential equations;
fractional partial differential equations;
fractional continuous models.

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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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