Special Issue

Theory and Applications in Nonlinear Oscillators

Message from the Guest Editors

Oscillations play an essential role in many physical systems and many applications. In recent years, many scientists have done a great deal of work studying oscillations and vibrations. In particular, non-linear oscillations present exciting characteristics that can describe complex phenomena or solve mechanical, electrical, and other problems. New scientific areas arise, such as non-linear targeted energy transfer or hidden oscillations. This Special Issue aims to provide a space where scientists share their recent developments, discoveries, and progress, both in theory and applications, in the field of non-linear oscillators. The topics of the issue include non-linear oscillations, hidden attractors, energy transfer, bifurcation theory, mathematical modeling of non-linear oscillators, synchronization and chaos control, non-linear electronic circuits, mechanical applications in oscillations, and others.

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Deadline for manuscript submissions

closed (31 July 2023)

Dynamics

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Impact Factor 0.9
CiteScore 1.7

mdpi.com/si/114912

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Message from the Editor-in-Chief

Dynamics aims to cover the research needs of scholars working mainly with physical and chemical processes and thus focuses on the study of systems in these two fields, presenting both theoretical and experimental results. Of particular interest are papers detailing new results concerning dynamics theory regarding differential equations (ordinary differential equations, stochastic differential equations, fractional order systems, nonlinear systems, and chaos) and their discrete analogs, which consist of the mathematical base of the presented physical and chemical models. *Dynamics* will also publish papers concerning computational results and applications of physical and chemical processes in biology, engineering, robotics, and the other sciences, as well as papers in other areas of mathematics that have direct bearing on the dynamics of these kinds of processes.

Editor-in-Chief

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