

Special Issue

Nonlinear Dynamics: Analysis, Optimization and Application

Message from the Guest Editors

This Special Issue highlights recent advancements, modern methodologies, and emerging challenges associated with nonlinear dynamics across diverse scientific and engineering disciplines. We warmly encourage researchers and practitioners engaged in the study or application of nonlinear dynamical systems to contribute their latest findings to this Special Issue of the MDPI journal *Applied Sciences*. This special issue will publish high-quality original research articles on the following and related topics:

- Nonlinear dynamics in structural, mechanical, aeronautical, ocean, and electrical engineering.
- Analytical, numerical, and experimental methods for studying nonlinear systems.
- Nonlinear modeling in control, system identification, energy harvesting, friction, and damping.
- Nonlinear vibrations in vibro-impact, self-excited, parametric, and non-ideal systems.
- Advanced techniques for analyzing stability, resonance, and multistability.
- Applications demonstrating the role of nonlinear effects in improving performance or control.
- Studies integrating theory, computation, and experiments to address complex nonlinear behavior.

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Deadline for manuscript submissions

20 February 2027



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.9
CiteScore 6.1



mdpi.com/si/263205

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About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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