



Phenomena in Nonlinear Dynamical Systems: Theory and Application

Guest Editor:

Prof. Dr. Livija Cveticanin

Faculty of Technical Sciences,
University of Novi Sad, Novi Sad,
Serbia

Deadline for manuscript
submissions:

31 August 2024

Message from the Guest Editor

Dear Colleagues,

Although research in the field of dynamics and oscillations dates back to ancient times, some problems still remain unsolved; these issues primarily concern non-linearities in systems or processes. The aim of this Special Issue is to publish the results of research on the influence of both physical and geometric nonlinearities on system dynamics. The following topics are of interest:

Mathematical modelling of nonlinear dynamical and vibration systems and processes;
New analytical and numerical solving procedures for strong nonlinear oscillators;
Nonlinear phenomena in dynamic systems;
Bifurcation and deterministic chaos;
Control in nonlinear oscillators;
Analogies between nonlinear mechanical and other systems;
Application of nonlinear oscillators in applied sciences and engineering.

The Special Issue on “Phenomena in Nonlinear Dynamical Systems: Theory and Application” welcomes not only submissions on the aforementioned topics but also on all recent research covered by the topic in the title. The call is open to a broad thematic range of papers covering recent applications of dynamics, vibration and control theory.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Contact Us

Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](#)