Special Issue

New Approaches for Nonlinear Waves

Message from the Guest Editors

Theoretical and experimental studies of nonlinear waves constitute a vast area of research that includes various fields of physics, applied mathematics, and engineering. ecology, electric networks, and many other areas of fundamental and applied phenomenology.

Relatively recent advances in the field include nonlinear-wave propagation in diverse artificial photonic media, various settings combining the SOC and nonlinearity of two- and multi-component systems occurring in BEC and optics or photonics, “quantum droplets”, maintained by the interplay of mean field and quantum fluctuation effects in BEC, and nonlinear waves in systems with fractional diffraction and/or dispersion.

This Special Issue welcomes the submission of theoretical and experimental papers that present novel results obtained via previously developed methods, as well as the development of new methods that advance various aspects of this vast field. Both original papers and full-length or brief review articles are welcome.

Guest Editors

Prof. Dr. Boris A. Malomed

Prof. Dr. Kwok W. Chow

Dr. Huimin Yin

Deadline for manuscript submissions

20 December 2025

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/242698

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/journal/applsci

MDPI

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

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

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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)