

Special Issue

New Advances in Nonlinear Dynamics Theory and Applications

Message from the Guest Editors

Since Huygens witnessed two types of nonlinear phenomena in 1673, namely the significant deviation of a pendulum from isochronism and the synchronization of dual frequency clocks, the research and development of nonlinear dynamics theory have gone through a difficult period. However, the limitations of research methods at that time resulted in its theoretical system only becoming complete nearly a century ago. It is particularly worth mentioning that in recent decades, the flourishing of bifurcation and chaos research has pushed nonlinear dynamics to the forefront of international disciplines. The purpose of this Special Issue is to promote the development and application of nonlinear dynamics theory in fields. We welcome all innovative research studies on nonlinear dynamics theory and its application development. We look forward to receiving research manuscripts on the topics of chaos, complex systems, memristors, neural networks, synchronous control, system stability, nonlinear circuits, and nonlinear dynamics applications. Please note that the research direction is not limited to the above-mentioned topics.

Guest Editors

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Deadline for manuscript submissions

closed (31 January 2026)



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About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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