Aims and Scope

The Journal of Applied Nonlinear Dynamics is a journal aiming at increasing the basic and applied knowledge in the interdisciplinary field of nonlinear sciences, including nonlinear dynamics, chaos and complex systems, and focusing on physics, applied mathematics, engineering and other applied disciplines. The aim of the journal is to stimulate research in nonlinear phenomena in science and engineering. Manuscripts in complex dynamical systems with nonlinearity and chaos are solicited, which includes physical mechanisms of complex systems and engineering applications of nonlinear dynamics. The journal provides a place to researchers for the rapid exchange of ideas and techniques in nonlinear dynamics.

No length limitations for contributions are set, but only concisely written manuscripts are published. Brief papers are published, either as technical notes or concise new results. Discussions of previous published papers are also welcome. The journal aims to be a forum of exchange of new research results for physicists, applied mathematicians, and engineers involved in Nonlinear Science and Numerical Simulation. Topics of interest includes but not limited to

- Deterministic chaos,
- Nonlinear dynamical systems and control,
- Fractional dynamics and applications,
- Synchronization phenomena,
- Fractal structures in nonlinear dynamics,
- Fluctuations and noise effects on dynamical systems
- Chaos in Hamiltonian systems,
- Nonlinearity and chaos in quantum mechanics,
- Chaos in Astrophysics and Celestial Dynamics,
- Integrable systems and solitons,
- Collective behaviors in many-body systems,
- Biological physics and networks,
- Nonlinear mechanical systems,
- Nonlinear phenomena and chaos in Physics
- Complex systems and complexity.

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