DESCRIPTION

*Chaos, Solitons & Fractals* aims to be the leading journal in the interdisciplinary field of *Nonlinear Science*.

It encourages the submission of high-quality articles (under the form of short communications, regular papers, and review papers) concerning the *fundamentals* of the following subjects: nonlinear dynamics and non-equilibrium processes in physics and applied mathematics; complex matter and networks; biophysics, systems biology and computational biology; fluctuations and random processes; artificial intelligence, machine learning and big data analytics; self-organization and emergent phenomena; applications to social science, engineering and econophysics.

The journal can only accept papers whose primary subject area lies within the above Aims & Scope.

In particular, please take notice of the following, additional, criteria:

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Notice that if the above criteria are not fulfilled, submissions may be desk-rejected by the Journal’s Editors without being sent to reviewers.

AUDIENCE

Engineers, physicists and mathematicians involved in nonlinear sciences, chaos and fractal research.

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Theory of nonlinear dynamical systems and chaos modelling from observational data; Applications to environmental behaviors as observed in situ or from space, with a special focus on biosphere (vegetation, ecology, epidemiology) and hydrosphere (karstic springs, ground water, snow)

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Chaos in electronic oscillators, Functional neuroscience, Neurophysiology, Non-linear circuits, Pattern formation mechanisms, Synchronization.

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Stochastic systems, with applications at the interface between physics, biology, sociology and economics, in particular phase transitions and tipping points, ergodicity breaking and estimation of risk in uncertain environments

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