Special Issue

Application of Non-linear Dynamics

Message from the Guest Editors

Nonlinear dynamics was originally developed as a new area of research in applied physics and mathematics. Now, it is known that most physical processes and phenomena are non-linear. Although many issues are roughly taken as linear and that approach gives satisfactory results, there are some practical problems where non-linear effects need to be considered. Some observable phenomena like chaos, synchronization, multistability, jump or hysteresis in resonance, etc. can only be captured in the non-linear models. Sometimes, nonlinear behavior of the system is desired and could give many advantages: increase efficiency, stability, or control. This Special Issue is focused on contemporary applications, innovative theories, and challenges related to nonlinear dynamics in various branches of science and technology.

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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.

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