Special Issue

Modeling, Simulation and Control of Dynamical Systems

Message from the Guest Editors

Dynamical systems arise in various engineering fields, including electrical, mechanical, civil, and control engineering areas. In order to study and characterize the systems that involve dynamic processes, mathematical modeling and simulation are required. Such engineering tools play a vital role in understanding the system behavior, designing a suitable control law, and analyzing the system's stability. The design of proper control schemes is essential to track the desired trajectory and improve the system dynamics. However, in real-world applications, the nonlinearities, modeling uncertainties, and external disturbances can complicate the modeling and control design tasks. Hence, advanced approaches are required to design robust control schemes and provide rigorous analysis to ensure the stability of the closed-loop control systems. In this context, this Special Issue aims to collect stateof-the-art research contributions on the modeling. simulation, and control of dynamical systems. Accurate models and advanced control techniques of nonlinear systems that resolve practical control design issues are encouraged.

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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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