Special Issue

New Advances in Control Theory and Its Applications

Message from the Guest Editor

As the core of systems science and engineering practice, control theory has evolved from classical cybernetics to modern state-space methods, continuously driving industrial innovation and technological progress. In recent years, with the deep integration of artificial intelligence, big data, and the Internet of Things, interdisciplinary research between control theory and emerging technologies has become a hot topic. We are publishing this Special Issue in order to collect the latest research advances regarding control within nonlinear systems and popular fields. Research areas may include, but not limited to, the following: Chaos-control algorithms for mechanical, electrical, electronic, chemical, and other systems. Applications of fractional-order/stochastic differential equations in nonlinear control.

Design of control algorithms for high-dimensional systems/neural networks.

Cooperative control of multi-agent systems and optimization of swarm intelligence.

Challenges and applications of intelligent control in the field of new energy.

Optimization and planning of control algorithms in complex systems.

Security control of cyber–physical systems under cyber attacks.

Guest Editor

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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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