Special Issue

Advanced Control Systems and Control Engineering

Message from the Guest Editors

As our world is becoming increasingly automated and interconnected, the need for robust, efficient, and intelligent control systems has never been more critical. This Special Issue is dedicated to exploring the forefront of this vital field, highlighting groundbreaking research and innovations that address contemporary challenges. Our focus includes the following topics.

Advances and applications in reinforcement learning: introducing adaptive algorithms that enhance decision-making processes, allowing systems to learn and improve over time.

Theoretical physics-informed learning: bridging the gap between machine learning and traditional physics, providing robust models that respect and leverage known physical laws.

Path planning in complex environments: this is pivotal for the efficient and safe navigation of autonomous vehicles and robots.

Multi-agent systems: enabling coordinated actions among multiple autonomous entities, unlocking new possibilities in complex, dynamic environments. Advances in fault-tolerant control systems: these are essential for maintaining functionality in the face of component failures, ensuring reliability and safety in critical applications.

Guest Editors

Dr. Francisco Rego

Dr. Ricardo Simões Santos

Dr. Sylvain Bertrand

Deadline for manuscript submissions

20 August 2025



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/210744

Applied Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41616837734 applsci@mdpi.com

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



About the Journal

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 multidimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

