Special Issue

Advances in Dynamic Systems by Smart Structures

Message from the Guest Editors

Smart structures are mechanical structures equipped with sensors, actuators, and signal processing capabilities in which sensor data are automatically analyzed using modern signal processing algorithms. The information provided by these algorithms is fed to actuator systems, which then act on the mechanical structure to ensure ideal system properties and optimum operating scenarios at all times. To master the complexity of smart dynamic systems right from the start, adaptation and new interdisciplinary development processes that take the entire product life cycle into account are required. A prerequisite for this is a holistic understanding of the system, including external boundary and environmental conditions. This Special Issue seeks to address recent advances in the optimization of properties and the operation of dynamic systems by utilizing smart structure approaches, including sophisticated development processes.

Keywords:
- sophisticated development processes
- smart dynamic systems
- smart structures
- manufacturing processes
- sensor data

Guest Editors

Dr. Sven Herold

Dr. Thilo Bein

Prof. Dr. Hans Peter Monner

Dr. Malte Misol

Deadline for manuscript submissions

closed (30 July 2025)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/227138

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/journal/applsci

MDPI

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 multi-dimensional 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)