Special Issue

Advances in Human-Computer/Robot Interaction for Automation and Process Control

Message from the Guest Editor

Human–Computer Interaction (HCI) and Human–Robot Interaction (HRI) began with ensuring safe actions in shared environments and evolved into active cooperation in concurrent tasks. Today, generative artificial intelligence enables effective communication between humans and systems—including robotic, industrial, processing, and home appliances. Intelligent interfaces expand accessibility by reducing required user skills, shifting certain functions from human to system. The pervasive use of machine learning in new industrial devices enhances production and enables innovative HCI and HRI collaboration in daily life. Robotic systems in industrial and assistive processes, especially in medical robotics and human support, benefit from these advancements. This Special Issue seeks research that explores these developments and serves as a reference for future milestones in HCI and HRI. Topics may include, but are not limited to, the following:

- AI for HCI and HRI
- HCI/HRI-driven Applications
- HCI/HRI in Cybersecurity
- Virtual Interaction & Interfaces
- Smart Devices
- Automation Systems
- Safe & Cooperative Process Control

Guest Editor

Dr. Paolo Di Giamberardino

Department of Computer, Control and Management Engineering "Antonio Ruberti", Sapienza University of Rome, Via Ariosto, 25, 00185 Rome, Italy

Deadline for manuscript submissions

31 July 2026

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/249009

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)