Special Issue

Intelligent Actuators

Message from the Guest Editor

A lot have been done in recent years in order to improve the quality and efficiency of the industrial processes, both in the control theory as well as in practice. Intelligent actuators and sensors, functional safety, cybersecurity, fault-tolerant and self-repair systems, embedded diagnostics, computational cloud technologies, and implementation of Industry 4.0 concepts are the only chosen keywords that address contemporary technology revolution in the area of actuators. The primary aim of this Special Issue is to bring together recent ideas, results of research, technology, and theoretical achievements focused particularly on the intelligent actuators intended for automatic control and robotics. This Issue aims also to underline the place, value, and increasing role of these devices. We invite research, process and control engineers, and process operators to join this Issue. We also cordially invite academia and practitioners to discuss the problem of to which extent the idea of virtual actuators will find industrial applications, as has been the case for virtual sensors.

Guest Editor

Dr. Michał Bartyś

Institute of Automatic Control and Robotics, Warsaw University of Technology, plac Politechniki 1, 00-661 Warszawa, Poland

Deadline for manuscript submissions

closed (31 March 2022)

Actuators

an Open Access Journal by MDPI

Impact Factor 2.3
CiteScore 4.3

mdpi.com/si/53862

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

mdpi.com/journal/actuators

Actuators

an Open Access Journal by MDPI

Impact Factor 2.3
CiteScore 4.3

mdpi.com/journal/actuators

About the Journal

Message from the Editorial Board

We are just entering the Next Wave of Technology (NWT) where actuators will play the same role as the computer chip did for computers/social media approximately four decades ago. Just in the U.S., production of $1 trillion year of electromechanical systems (vehicles, orthotics, manufacturing cells, freight trains, aircraft, etc.) will be impacted by the NWT, all driven by actuators. Five key trends can be found for the future perspectives: “Performance to Reliability”, “Hard to Soft”, “Macro to Nano”, “Homo to Hetero” and “Single to Multi functional”. We invite papers that primarily impact these economic sectors; those illustrating basic scientific principles are also welcome.

Editors-in-Chief

Prof. Dr. Kenji Uchino
Emeritus Academy Institute, The Pennsylvania State University, University Park, PA 16802, USA

Prof. Dr. Norman M. Wereley
Department of Aerospace Engineering, University of Maryland, 3179J Martin Hall, College Park, MD 20742, USA

Author Benefits

Open Access:

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

High Visibility:

indexed within SCIE (Web of Science), Scopus, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Mechanical) / CiteScore - Q1 (Control and Optimization)

MDPI