Special Issue

The Application of Sliding Mode Control in Robots

Message from the Guest Editor

Control of robot systems is a challenging area of robotics. Robot systems are multivariable, highly nonlinear systems that are subject to several uncertainties and disturbances. As a result, the design of accurate mathematical models for multi-degree of freedom (DOF) robots is very difficult. Today, there is a large variety of working robots (industrial robots, service robots, social robots, underwater robots, etc.) that perform various complex tasks, for which several control techniques were developed and documented in the literature. The *sliding mode control* (SMC) is indeed one of the best available methodologies and has been applied with success in many robotic and other automation applications. The aim of this Special Issue of the Applied Sciences Journal is to provide a forum for the presentation of new and recent developments in the SMC methodology as applied to robots. Specifically, the Issue will consider high-quality research and review papers that deal with theoretical and application aspects of sliding mode robot control.

Guest Editor

Prof. Dr. Spyros G. Tzafestas School of Electrical and Computer Engineering, National Technical University of Athens, Athens, Greece

Deadline for manuscript submissions

closed (30 June 2019)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/22002

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



<u>applsci</u>



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)