Special Issue

Advances in Robust Control for Automated Manufacturing System

Message from the Guest Editors

The construction of smart factories is a hot issue in the global manufacturing industry. German Industry 4.0 and American Industrial Internet both focus on the construction of smart factories in order to transform, upgrade and innovatively develop the manufacturing industry. Since there resource sharing in smart factories is common, deadlocks may occur without proper control, which may shortcut their performance. Thus, it is important to develop efficient methods to avoid deadlocks, while optimizing the performance of smart factories. Although many control policies and scheduling methods have been proposed, only a few of them have been applied in smart factories due to their performance defects. This Special Issue is aimed at addresses the analysis, design and implementation of control policies and optimization algorithms in smart factories. This includes:

- Robust control policies;
- Scheduling algorithms;
- Planning algorithms;
- Routing planning algorithms;
- Deadlock control policies;
- Packing algorithms;
- Performance analysis algorithms;
- Digital twin technologies;
- Energy saving control;
- Maintenance decision making.

Guest Editors

Dr. Jianchao Luo

School of Software, Northwestern Polytechnical University, Xi'an 710129, China

Dr. Jun Xu

Guangzhou Institute of Technology, Xidian University, Guangzhou 510555, China

Deadline for manuscript submissions

closed (15 August 2024)



an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



mdpi.com/si/169222

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

mdpi.com/journal/

electronics





an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



electronics



About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

Prof. Dr. Flavio Canavero Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

Author Benefits

High Visibility:

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

Journal Rank:

JCR - Q2 (Engineering, Electrical and Electronic) / CiteScore - Q1 (Electrical and Electronic Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).