Special Issue

Dynamics Modeling, Control, and Eco-Driving of Heavy Equipment & Machinery for Eco-Friendly Environments

Message from the Guest Editors

Heavy equipment, or heavy machinery, refers to heavyduty vehicles. These vehicles are frequently used for construction, lifting, landscaping, digging, road paving, forestry, etc., and consume extensive amounts of energy. In this Special Issue, we will analyze how an accurate dynamics model can be developed for ecofriendly safety and control applications to improve heavy equipment' overall efficiency. We welcome original papers on topics including, but not limited to, the following:

- Machine learning methods for modeling and control;
- Machine learning methods for eco-driving and energy saving applications;
- Multibody system methods for dynamics modeling and analysis;
- Other effective methods for modeling, control and energy saving applications;
- Health monitoring and management of heavy equipment and machinery;
- Fault diagnosis and prognosis of heavy equipment and machinery;
- Comfort and performance of heavy equipment and machinery;
- Passive and active safety control of heavy equipment and machinery.

Guest Editors

Dr. Yongjun Pan

Prof. Dr. Liang Hou

Prof. Dr. Zhixiong Li

Deadline for manuscript submissions

closed (15 September 2023)



Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 5.3



mdpi.com/si/159895

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

mdpi.com/journal/ electronics





Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 5.3



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 (Physics, Applied) / CiteScore - Q2 (Control and Systems Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.4 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the second half of 2024).

