

Special Issue

Fault Detection and Diagnosis of Intelligent Mechatronic Systems

Message from the Guest Editors

Intelligent mechatronic systems (IMSS), such as intelligent vehicles, robots, airplanes, engines, and marine systems, have received considerable attention due to their practical applications in real lives. However, IMSSs are generally complex due to the integrations of artificial intelligence and multidisciplinary features taken from mechanical engineering, computer engineering, electrical engineering, and control engineering. This integrated complexity leads to great challenges in system modeling and reliability testing due to different and complex failure modes. To achieve reliability requirements, fault detection and diagnosis are critical for the development of IMSSs. With the advances in sensing, network transmission, and information processing techniques, it is our opportunity to exploit them for the benefit of fault detection and diagnosis of IMSSs. Potential topics include but are not limited to:

- System modeling and analysis;
- Advanced sensing technologies for IMSSs;
- Sensor fusion for IMSSs;
- Fault detection of IMSSs;
- Fault diagnosis of IMSSs;
- Fault prediction of IMSSs;
- Health monitoring of IMSSs;

Guest Editors

Dr. Hui Zhang

Dr. Dan Zhang

Dr. Guoguang Zhang

Prof. Dr. Hamid Reza Karimi

Dr. Anh-Tu Nguyen

Deadline for manuscript submissions

closed (15 February 2020)



Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 5.3



mdpi.com/si/29582

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

[mdpi.com/journal/
electronics](https://mdpi.com/journal/electronics)





Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 5.3



[mdpi.com/journal/
electronics](https://mdpi.com/journal/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), CAPus /
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).