# **Special Issue**

# Fault Detection, Diagnosis, and Prognosis Techniques towards System Reliability Enhancement

# Message from the Guest Editors

This Special Issue will compile recent efforts contributing to fault detection, fault diagnosis, and fault prognosis techniques in the context of reliability enhancement and automation for mechatronic and rotary machinery systems. Contributions addressing state-of-the-art developments, algorithms, and methodologies, as well as perspectives on future developments and applications, are also welcomed. Manuscripts should contain both theoretical and practical/experimental-oriented results. The topics of interest include but not limited to:

- Model-based fault detection and fault-tolerant control techniques;
- Data-driven FDDP techniques;
- System reliability modeling, analysis, and optimization;
- Condition monitoring and maintenance of complex systems;
- Advanced signal processing techniques for FDDP;
- Machine learning techniques for FDDP;
- Reliability and resilience control for mechatronics systems;
- Failure analysis and prediction methods for mechatronics systems;
- Application studies such as turbomachinery, manufacturing, vehicles, and robotics.

### **Guest Editors**

Prof. Dr. Hamid Reza Karimi

Prof. Dr. Len Gelman

Prof. Dr. Defeng Wu

Prof. Dr. Dongsheng Yang

### Deadline for manuscript submissions

closed (15 June 2023)



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# 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

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