



Reliability Evaluation for Industrial Systems: State of the Art

Guest Editors:

Prof. Dr. Hongshuang Li

College of Aerospace
Engineering, Nanjing University
of Aeronautics and Astronautics,
Nanjing 210016, China

Prof. Dr. Yan-Fu Li

Department of Industrial
Engineering, Tsinghua University,
100084 Beijing, China

Prof. Dr. Xufeng Zhao

College of Economics and
Management, Nanjing University
of Aeronautics and Astronautics,
Nanjing 210016, China

Deadline for manuscript
submissions:

closed (15 October 2022)

Message from the Guest Editors

Dear Colleagues,

The complexity of industrial systems and the high requirements for mission reliability have posed great challenges for reliability evaluation and the design of all types of machines. Therefore, effective modeling, simulation techniques, and methods for assisting reliability evaluation and design have been demanding. At the same time, failure physics analysis, reliability testing techniques, and effective data processing methods are required for verification and/or support of the assessment of design of those systems. With this Special Issue, we intend to collect state-of-the-art developments on reliability theories and engineering practices related to industrial systems and to highlight important directions as well as challenges for further development.

The new wave of big data has posed new challenges to the reliability research community, given that traditional reliability models/methods were developed upon small/medium sized datasets. Therefore, new methods for big data such as deep learning need to be integrated into reliability models to cope with the new challenges.





an Open Access Journal by MDPI

Editor-in-Chief

**Prof. Dr. Antonio J. Marques
Cardoso**

CISE—Electromechatronic
Systems Research Centre,
University of Beira Interior,
Calçada Fonte do Lameiro, P-
6201-001 Covilhã, Portugal

Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.

Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.

There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

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), Inspec, and other databases.

Journal Rank: JCR - Q2 (Engineering, Mechanical) / CiteScore - Q2 (Control and Optimization)

Contact Us

Machines Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/machines
machines@mdpi.com
[X@Machines_MDPI](https://twitter.com/Machines_MDPI)