

## Special Issue

# Reliability and Risk of Complex Systems: Modelling, Analysis and Optimization, 2nd Edition

### Message from the Guest Editors

Modern industries are becoming highly integrated and developing overwhelming complexities, which simultaneously entails benefits and potential risks with catastrophic consequences. Reliability engineering, as an engineering discipline, develops rapidly throughout the whole lifecycle management of industrial systems, covering system analysis, system design, operation and maintenance, etc. This Special Issue aims to report cutting-edge methods and techniques in reliability-related fields by highlighting research on these key issues. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Reliability modelling and analysis of complex systems;
- Reliability-based design optimization (RBDO) methods;
- Risk analysis and reliability assessment for large-scale complex systems;
- Predictive maintenance schemes and decision-making optimization;
- Statistical methods for degradation modelling;
- Machine learning techniques and applications in reliability engineering;
- Uncertainty quantification and analysis for safety-critical systems;
- Bayesian methods for reliability analysis.

We look forward to receiving your contributions.

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### Guest Editors

Dr. Lechang Yang

Dr. Qingqing Zhai

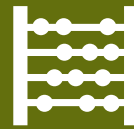
Dr. Rui Peng

Dr. Aibo Zhang

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### Deadline for manuscript submissions

30 June 2026



## Axioms

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## About the Journal

### Message from the Editor-in-Chief

*Axioms* is dedicated to the foundations (structure and axiomatic basis, in particular) of mathematical theories, not only from a crisp or strictly classical sense, but also from a fuzzy and generalized sense. This includes the more innovative current scientific trends, devoted to discover and solve new challenging problems. The prime goal of *Axioms* is to publish first-class, original research articles under an open access policy with minimal fees for the authors. We would be pleased to welcome you as one of our authors.

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### Editor-in-Chief

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