



Mathematical Modelling and Computational Methods in Reliability Engineering

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Message from the Guest Editors

Complex engineering systems can be impacted by various types of uncertainties. These uncertainties can affect the system's performance, resulting in inadequate fulfilment of its intended function. Thus, reliability has become an important issue. To design a reliable engineering system, it is important to understand its failure mechanism, estimate the reliability (or failure probability), analyze the effects of different uncertain factors on system failure.

This Special Issue titled "Mathematical Modelling and Computational Methods in Reliability Engineering" aims to present recent research about theoretical and numerical studies in reliability engineering. Potential topics include but are not limited to: (1) modelling of failure mechanism, (2) computational methods for failure probability estimation, (3) reliability sensitivity analysis, (4) reliability-based design and optimization, (5) Bayesian statistics in reliability engineering, (6) applications with reliability engineering problems. Original research articles and comprehensive reviews are highly welcome.





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Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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