Special Issue

Reliability Analysis and Stochastic Models in Reliability Engineering

Message from the Guest Editors

Reliability relates to the probability of the functioning of a system under specified conditions over an intended period of time. Reliability is hot topic that permeates our daily experience. Unexpected failures may cause situations dangerous to human life, unplanned production outages, etc. This is why researchers must focus on progressive methods to optimize reliability. Probability theory and statistics are basic disciplines in science and management. The domain of these disciplines in reliability covers a wide range of applications, from consumer products to health care, manufacturing to software engineering, and electronics to the environment. This Special Issue covers several topics referring to reliability analysis, including new trends and novelties in both theory and applications. Potential topics include, but are not limited to: reliability analysis and the prediction of complex systems, mathematical models for maintenance optimization, renewal processes, the methodology of Fault Tree Analysis, Bayesian methods in reliability, dynamic reliability models, multi-state system analysis, non-parametric reliability methods, and analysis of reliability data.

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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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