Special Issue

Industrial System Reliability Modeling and Optimization

Message from the Guest Editors

This Special Issue aims to explore and disseminate the latest research developments, practical applications, and theoretical advancements in the field of industrial system reliability. It aligns with the journal's scope by focusing on system design, performance optimization, predictive maintenance, and decision-making, which are central to sustainable and resilient industrial operations. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following topics: - Reliability modeling and optimization in complex industrial systems; - Data-driven predictive maintenance and condition monitoring; - Fault detection and remaining useful life (RUL) prediction; - AI and machine learning for reliability engineering; - Digital twins and IoT applications in reliability assessment; - Risk analysis and stochastic modeling for industrial systems; - Case studies on reliability improvement in manufacturing, transportation, and energy sectors; - Human factors and safety considerations in reliability-centric system design.

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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