Special Issue

New Trends and Innovations in Reliability and Resilience for Emerging Complex Systems

Message from the Guest Editors

In the last decade, with the vigorous development of artificial intelligence (AI) technology, some emerging complex systems (multimodal traffic, urban air mobility, smart infrastructure, etc.) have influenced our daily lives and brought new economic growth points to society. As emerging complex systems continue to face various challenges, including unexpected disruptions, natural disasters, and unforeseen events, the concept of sustainability has become increasingly important, especially for reliability and resilience. However, the problems of emerging complex systems are inherently complex due to various factors, such as safety requirements, failure uncertainty, and autonomous and intelligent behavior. This complexity makes precise modeling and optimization highly challenging, often necessitating some new technologies and solutions. This Special Issue will provide an interdisciplinary platform for researchers and experts from academia and industry to explore the latest trends and innovations in the fields of reliability, resilience, maintenance, scheduling and planning to address challenges in emerging complex systems.

Guest Editors

Dr. Dongming Fan

Dr. Heng Zhang

Dr. Nan Zhang

Dr. Yixin Zhao

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Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

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Message from the Editor-in-Chief

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.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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