



Recent Advances in Complex Mechanical System

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Message from the Guest Editor

The new generation of information technology represented by the Internet, big data, cloud computing, artificial intelligence, etc., is accelerating integration with industrial technology. The mechanical equipment system is facing new challenges and scientific conundrums, such as the integration of design and manufacturing, the integration of structure and function, the extreme service environment and working conditions, the high quality of equipment accuracy, the autonomy of operation decision-making and control, the equipment manufacturing and service greening, which put forward higher requirements for independent design and manufacturing of complex equipment systems. The deep integration of multi-source heterogeneous information and knowledge of mechanical equipment in the whole life cycle of creativity, design, processing, assembly, testing, service, maintenance and recovery, and the development of intelligent design methods for complex equipment are important directions for future equipment innovative design.

- intelligent mechanical equipment
- integrated design
- equipment reliability analysis
- system fault prediction
- autonomous control and decision-making





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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.

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