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## Entropy Applications in Condition Monitoring and Fault Diagnosis

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### Message from the Guest Editors

Dear Colleagues,

With the increasing automation of industrial production, the complexity of the system has increased significantly. The study of complex system condition monitoring and fault diagnosis technology is of great importance to improve both the level of technology and productivity. The long-term development of information theory makes it possible to use information-theoretic methods for signal feature extraction analysis of complex systems. Entropy, as a characteristic indicator to measure the uncertainty of signal state distribution and signal complexity, can quantitatively describe the information contained inside the signal. The study of how to use entropy to reflect the operation state and characteristic information of complex systems has become one of the current research hotspots in the field of condition monitoring and fault diagnosis.

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*Guest Editors*



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## Message from the Editor-in-Chief

The concept of entropy is traditionally a quantity in physics that has to do with temperature. However, it is now clear that entropy is deeply related to information theory and the process of inference. As such, entropic techniques have found broad application in the sciences.

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