



Thermodynamics of Nonequilibrium Processes

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Message from the Guest Editor

There have been great efforts in formulating nonequilibrium systems with thermodynamics. One big dilemma in nonequilibrium systems has been the distance from equilibrium. Prigogine proposed thermodynamic branch of linear and nonlinear regions where the bifurcations may lead to highly distinct outcomes in near equilibrium and far from equilibrium regions. Another important aspect is the scale of nonequilibrium systems, transport and rate processes in small-scale systems, create unique challenges. Additionally, the fluctuations in nonequilibrium small systems has opened new avenues for research and development in stochastic thermodynamics. In addition, constructal law, ecosystems, extended nonequilibrium thermodynamics, fluctuation theory, quantum thermodynamics, and self-organized criticality are some of the topics attracted researchers in using thermodynamics in describing nonequilibrium systems. I cordially invite researchers, engineers, and students to submit their research papers related to thermodynamics of nonequilibrium processes in this Special Issue.





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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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