Special Issue

Numerical Modeling and Hybrid Methods for Thermal Management, Storage, and Optimization

Message from the Guest Editors

Energy has long been at the center of the sustainable development paradigm. Increasing energy efficiency is identified as one of the main challenges for energy systems. Almost all energy systems involve heat. In this sense, thermal management, storage, and optimization play an important role in achieving highly efficient systems, which has attracted the attentions of both the academic and industrial communities. Generally, mathematical modeling is the basis for the study on the heat-related topics. This Special Issue will focus on recent theoretical and computational studies on Thermal Management, Storage, and Optimization. Topics include, but are not limited to: 1. Numerical simulation in heat transfer, including heat conduction, heat convection, and thermal radiation;
2. Modeling and analysis of heat storage process or system;
3. Thermal management and design of electronics;
4. Heat transfer intensification and optimization;
5. Modeling and simulation in energy materials;
6. Modeling and analysis of thermal transport at small scales and non-Fourier regimes;
7. Study of thermal problems using AI/Machine Learning techniques.

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MDPI

About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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