

## Special Issue

# Heat and Mass Transfer Optimization in Efficient Energy Conversion and Thermal Management

### Message from the Guest Editors

This Special Issue highlights theoretical and experimental investigations that contribute to optimizing energy conversion processes through advanced thermal management techniques. Topics of interest include innovative heat exchanger designs, phase change materials, nanofluids, passive and active cooling strategies, CFD-based analyses, and multiscale modeling approaches. Moreover, it also emphasizes the use of artificial intelligence, machine learning, and optimization algorithms to enhance the control and prediction of thermal behavior. Therefore, the core objective is to address current challenges in reducing energy consumption, increasing thermal efficiency, and promoting environmental sustainability in modern energy systems. Finally, this Special Issue aims to serve as a platform for exchanging innovative ideas and practical solution proposals targeting the complex challenges of thermal engineering.

### Guest Editors

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### Deadline for manuscript submissions

20 December 2025



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