Special Issue

Innovations in Thermographic Techniques for Diagnostics and Monitoring: Quantitative Methods, AI, and Real-Time Applications

Message from the Guest Editors

This Special Issue invites research and comprehensive reviews on thermographic techniques for diagnostics and monitoring across science and engineering. We welcome advances in quantitative thermography, active modalities, and 3D/temporal thermography integrated with rigorous heat-transfer modeling. Contributions leveraging physics-informed and data-driven methods, as are multisensor fusion approaches and edge/realtime deployment for closed-loop control. Application domains may include nondestructive evaluation, electronics and batteries, structural health monitoring, buildings/energy audits, and biothermal diagnostics. We particularly welcome benchmark datasets, open-source toolboxes, and reproducibility studies that establish common evaluation protocols and reporting standards. Perspective/roadmap papers synthesizing best practices and future challenges are also welcome.

Guest Editors

Dr. Luca Santoro

Department of Mechanical and Aerospace Engineering, Politecnico di Torino, Corso Duca degli Abruzzi 24, 10129 Turin, Italy

Dr. Michele Quercio

Department of Electronic and Mechanical Engineering, Università Degli Studi Roma Tre, 00146 Rome, Italy

Deadline for manuscript submissions

31 March 2026



Thermo

an Open Access Journal by MDPI

Impact Factor 2.3 CiteScore 3.9



mdpi.com/si/251510

Thermo
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
thermo@mdpi.com

mdpi.com/journal/ thermo





Thermo

an Open Access Journal by MDPI

Impact Factor 2.3 CiteScore 3.9



About the Journal

Message from the Editor-in-Chief

Thermo (ISSN: 2673-7264) is an international, peer-reviewed, and open access journal that publishes original research papers, reviews, and Special Issues dealing with experimental, theoretical, and applied thermal sciences. Both theoretical (simulation) and/or experimental research papers within our journal's scope are of particular interest, including satellite-related topics considering thermophysics, solubility phenomena, chemical thermodynamics, and chemical engineering. We encourage scientists to publish their results in as much detail as possible, and there is no restriction on the maximum length of papers. We greatly appreciate suggestions for enhancing the journal.

Editor-in-Chief

Prof. Dr. Johan Jacquemin

Materials Science, Energy, and Nano-Engineering MSN Department, Mohammed VI Polytechnic University, Hay Moulay Rachid, Lot 660, Ben Guerir 43150, Morocco

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within ESCI (Web of Science), Scopus, EBSCO, and other databases.

Journal Rank:

JCR - Q2 (Thermodynamics) Rapid Publication: manuscripts are peer-reviewed and a first decision is provided to authors approximately 23 days after submission; acceptance to publication is undertaken in 4.6 days (median values for papers published in this journal in the first half of 2025).

