Special Issue

Innovations in Hypersonic Propulsion Systems

Message from the Guest Editors

We are seeking high-quality papers that explore recent developments, breakthroughs, and innovations in hypersonic propulsion systems. This Special Issue aims to provide a comprehensive overview of the latest theoretical, experimental, and computational research in this dynamic field. Contributions that offer new insights, propose novel technologies, or address existing challenges in hypersonic propulsion are particularly welcome.

- Hypersonic air-breathing engines: design, analysis, and performance optimization;
- Scramjet and dual-mode ramjet technologies;
- Materials and structures for hypersonic propulsion systems;
- Thermal management and cooling techniques for hypersonic vehicles;
- Combustion processes and fuel efficiency in hypersonic regimes;
- Shockwave and boundary layer interactions;
- Advanced propulsion concepts for space and high-altitude applications;
- Computational fluid dynamics (CFD) methods for hypersonic flows;
- Experimental methods and facilities for hypersonic testing;
- Flight testing and validation of hypersonic propulsion systems;
- Interdisciplinary approaches to hypersonic vehicle design and integration.

Guest Editors

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Dr. Zonghan Yu

Deadline for manuscript submissions

closed (15 April 2025)

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Message from the Editor-in-Chief

You are welcome to contribute a research article or a comprehensive review for consideration and publication in *Aerospace* (ISSN 2226-4310), an on-line, open access journal.
Aerospace adheres to rigorous peer-review as well as editorial processes and publishes high quality manuscripts that address both the fundamentals and applications of aeronautics and astronautics. Our goal is to enable rapid dissemination of high impact works to the scientific community.

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