

Special Issue

Numerical Simulations in Electric Propulsion

Message from the Guest Editors

This Special Issue aims to bring together the latest research on numerical simulations of electric propulsion systems.

- Numerical simulation of plasma physics in traditional electric propulsion systems, such as gridded ion thrusters, hall effect thrusters, pulsed plasma thrusters, electrospray, arcjets and MPD thrusters.
- Numerical simulation of novel plasma propulsion systems, such as helicon plasma thrusters, electron cyclotron resonance thrusters and radio-frequency ion thrusters.
- Numerical methodologies, such as particle-in-cell, kinetic methods, fluid methods, MHD and hybrid methods applied to electric propulsion systems.
- Optimization and design of electric propulsion systems using numerical simulations.
- Comparison of numerical simulation results with experimental data for electric propulsion systems.
- Numerical simulations of the plasma–satellite interaction
- Numerical simulation of atmosphere-breathing electric propulsion systems and plasma–atmosphere interaction.
- Numerical simulation of space debris removal by electric propulsion.
- Numerical simulation of electric propulsion systems for in-orbit servicing.

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Deadline for manuscript submissions

31 December 2025



Aerospace

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Impact Factor 2.2
CiteScore 4.0



mdpi.com/si/159477

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Message from the Editor-in-Chief

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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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