



Laser Propulsion Science and Technology

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Message from the Guest Editor

Laser propulsion is an emerging field that promises breakthroughs for various unique propulsion needs if the special challenges of using lasers to produce impulses can be overcome. Some examples of such challenges include beam divergence, coupling to remote targets, heat accumulation, the physics of short-pulse laser-material interaction, and, broadly, the fundamental physics governing laser-material interactions, which is still incompletely understood.

Laser technology has advanced significantly in the past decade, with novel high-power lasers and the development of the science of massive laser arrays, which may support fielded laser propulsion missions and applications. Some examples of such applications include interplanetary propulsion, interstellar propulsion, laser thrusters, laser tractor beams, and laser removal of orbital debris.

This Special Issue of *Aerospace* will cover recent experimental, theoretical, and computational work on the use of lasers to produce thrust or impulse, focusing on the fundamental science of laser propulsion and related space technology applications.

The editor of this Special Issue

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Guest Editor





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Message from the Editor-in-Chief

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