# Special Issue

# Laser Propulsion Science and Technology

### 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

### Guest Editor

Dr. John Sinko

Department of Physics & Astronomy, St. Cloud State University, 720 4th Ave S., St. Cloud, MN 56301, USA

### Deadline for manuscript submissions

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

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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.

## Editor-in-Chief

Prof. Dr. Konstantinos Kontis
School of Engineering, University of Glasgow, James Watt Building South, University Avenue, Glasgow G12 8QQ, Scotland, UK

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