



Solar-Pumped Lasers and Sustainable Laser Beams: Current and Future Development

Guest Editors:

Dr. Bruno D. Tibúrcio

Department of Physics, NOVA
University of Lisbon, 2829-516
Caparica, Portugal

Dr. Dawei Liang

Department of Physics, NOVA
University of Lisbon, 2829-516
Caparica, Portugal

Deadline for manuscript
submissions:

14 November 2024

Message from the Guest Editors

Laser technology is widely used in several industrial and scientific areas, such as laser material processing, the medical industry, energy production, communications and space applications.

Solar-pumped lasers, being a sustainable source of coherent optical radiation, offer the prospect of a drastic reduction in the cost for high and average laser power applications, opening pathways to environmental and economical benefits in different technological segments, such as green hydrogen production and renewable energy cycles.

The main current and future challenges of sustainable laser beams are to increase the efficiency, versatility and scalability compared with other classical, fossil-fuel-based laser beams, as a more robust and available implementation, suitable for different fields of low-carbon industry and poligeneration.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and
Applied Science, University of
Ontario Institute of Technology,
Oshawa, ON L1G 0C5, Canada

Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Author Benefits

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

High Visibility: indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, AGRIS, RePEc, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Environmental Studies*) / CiteScore - Q1 (Geography, Planning and Development)

Contact Us

Sustainability Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sustainability
sustainability@mdpi.com
X@Sus_MDPI