Special Issue

Semiconductor Lasers and Their Biomedical Applications

Message from the Guest Editor

Semiconductor lasers are the fastest growing class of lasers. They are widely applied for pumping of solid states and fiber lasers and actively used in medicine. The unique properties of these lasers make it possible to create new original laser and biomedical technologies. In some cases, the use of semiconductor lasers makes it possible for already known medical procedures to be more effective, safe, painless, simple, and cheap. Semiconductor lasers can be used for ablation and coagulation of hard and soft biological tissues during surgical treatment, optical diagnostics of tissues, tissue regeneration, tissue bonding, photodynamic therapy and diagnostics of various diseases, drug delivery, etc. With this Special Issue, we aim to provide a selection of original research articles, reviews, and perspectives reporting the latest advancements in the design of semiconductor lasers and their biomedical applications.

Guest Editor

Prof. Dr. Andrey V. Belikov

Faculty of Nanoelectronics, ITMO University, 197101 St. Petersburg, Russia

Deadline for manuscript submissions

closed (15 October 2021)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/75210

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applisci@mdpi.com

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Author Benefits

Open Access:

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

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

