Special Issue

New Frontiers of Laser Welding Technology

Message from the Guest Editor

Laser welding is a precision welding process that enables high process speed and low distortion due to low heat input into the base materials. It has been applied to various industries (e.g., automotive, electronics, etc.). Thin sheets with steel were the main application of laser welding in early stages. With the advances of power sources and optic technologies, new laser welding applications have been continuously introduced. Multi-kW fiber and disk lasers have been successfully applied to the welding of thickness plate and nonferrous alloys due to its deep penetration and high absorptivity. More recently, use of hard-to-weld material combinations has been continuously increasing in the industrial applications, and innovative laser welding technologies are emerging to meet the material requirements. For instance, laser modulation technologies are one of the hottest topics in the laser industry and academy to replace ultrasonic welding in the manufacturing of secondary battery cells.

Guest Editor

Dr. Cheolhee Kim

Joining R&D Group, Korea Institute of Industrial Technology (KITECH), 156, Gaetbeol-ro, Yeonsu-Gu, Incheon 21999, Korea

Deadline for manuscript submissions

closed (29 February 2020)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/20314

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

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/journal/applsci

MDPI

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)