



Special Issue Reprint

## **Advances in Laser Materials Processing**

www.mdpi.com/books/reprint/6076

Edited by Sergey N. Grigoriev Marina A. Volosova Anna A. Okunkova

ISBN 978-3-0365-4887-6 (Hardback) ISBN 978-3-0365-4888-3 (PDF)

Laser processing has become more relevant today due to its fast adaptation to the most critical technological tasks, its ability to provide processing in the most rarefied and aggressive mediums (vacuum conditions), its wide field of potential applications, and the green aspects related to the absence of industrial cutting chips and dust. With the development of 3D production, laser processing has received renewed interest associated with its ability to achieve pointed to high-precision powder melting or sintering. New technologies and equipment, which improve and modify optical laser parameters, contribute to better absorption of laser energy by metals or powder surfaces and allow for multiplying laser power that can positively influence the industrial spread of the laser in mass production and advance the existing manufacturing methods.

The latest achievements in laser processing have become a relevant topic in the most authoritative scientific journals and conferences in the last half-century. Advances in laser processing have received multiple awards in the most prestigious competitions and exhibitions worldwide and at international scientific events.

The Special Issue is devoted to the most recent achievements in the laser processing of various materials, such as cast irons, tool steels, high entropy alloys, hard-to-remelt materials, cement mortars, and post-processing and innovative manufacturing based on a laser.



Order Your Print Copy You can order print copies at www.mdpi.com/books/reprint/6076



# MDPINBOOKS Publishing Open Access Books & Series

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



#### **Open Access**

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



#### **Author Focus**

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



#### **High Quality & Rapid Publication**

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



ᆔ

#### High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).

### Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG Grosspeteranlage 5 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

