crystals

an Open Access Journal by MDPI

IMPACT FACTOR 2.7

CITESCORE 3.6

Surface Modification Treatments of Metallic Materials

Guest Editors:

Dr. Jiaqiang Dang
State Key Laboratory of Mechanical System and Vibration, School of Mechanical Engineering, Shanghai Jiao Tong University, Shanghai 200240, China

Dr. Yong Wang
Shanxi Key Laboratory of Precision Machining, College of Mechanical and Vehicle Engineering, Taiyuan University of Technology, Taiyuan 030024, China

Dr. Zongwei Ren
Manufacturing Laboratory, School of Engineering, The University of Tokyo, Tokyo 1138656, Japan

Deadline for manuscript submissions:
24 May 2024

Message from the Guest Editors

Crystalline metals and alloys with distinguished mechanical properties and fatigue resistance have been universally applied in the critical components of the aviation industry. The surface integrity of manufactured components is essential since it directly influences fatigue crack initiation and initial propagation. However, it is challenging to manufacture parts with high surface integrity due to the poor machinability of high-strength metallic materials.

This Special Issue aims to provide a forum for original research works and review articles on current advances in the research fields of surface modification of metallic materials. Areas of interest include but are not limited to shot peening, deep rolling, laser shock peening, ultrasonic surface rolling, surface mechanical attrition treatment, ultrasonic impact treatment, micro-forging, and mechanical machining, applied for surface modification of metallic materials. Aspects of investigations can be advanced surface modification techniques, surface integrity characterization, mechanical property evaluation, fatigue testing, simulation, and applications.

crystals

an Open Access Journal by MDPI

IMPACT FACTOR 2.7

CITESCORE 3.6

Editor-in-Chief

Prof. Dr. Alessandra Toncelli
Department of Physics, University of Pisa, 56126 Pisa, PI, Italy

Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

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), Inspec, CAPlus / SciFinder, and other databases.
Journal Rank: JCR - Q2 (*Crystallography*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

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

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

mdpi.com/journal/crystals
crystals@mdpi.com
𝕏@Crystals_MDPI