



crystals



an Open Access Journal by MDPI

Advances of Welding Materials

Guest Editor:

Prof. Dr. Shanping Lu

Institute of Metal Research,
Chinese Academy of Sciences,
110016 Shenyang, China

Deadline for manuscript
submissions:

closed (15 September 2022)

Message from the Guest Editor

The welding and joining technologies of materials remain the key technology used in the contemporary manufacture of industrial products for use in the engineering of automobiles, aircraft, ships, pressure vessels, pipelines, construction, bridges, and electronic equipment, and so on. In industry, various welding and joining processes such as arc welding, high energy beam welding, and friction stir welding have been developed. According to the structural requirements determined by the material characteristics, welding joint performance, and other factors, the most appropriate welding process is selected for manufacturing. In order to improve the efficiency and quality of welding processes, research is actively being carried out across the world to clarify the mechanisms of welding processes scientifically, and to develop more advanced welding processes. However, further work is needed in this field.

The Special Issue aims to present state-of-the-art scientific developments in welding technology, which include welding materials, welding metallurgy, material weldability, and the evaluation of welding joints.



mdpi.com/si/81480

Special Issue



an Open Access Journal by MDPI

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](#), [Ei Compendex](#), [CAPlus / SciFinder](#), and [other databases](#).

Journal Rank: JCR - Q2 (Crystallography) / CiteScore - Q2 (Condensed Matter Physics)

Contact Us

Crystals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/crystals
crystals@mdpi.com
[X@Crystals_MDPI](#)