

## Special Issue

# Study of Structure, Heat Treatment and Properties of Steels

### Message from the Guest Editors

Steel as a construction material is still the basic material used for critical elements in many branches of industry. High requirements set up for constructions, such as increased service life, or increased yield strength, require using steels of higher and higher properties, optimum from the user point of view. Creating the required properties of steel is connected with the selection or optimization of the proper chemical composition, with controlled heating and quenching, as well as thermomechanical and thermochemical operations. It allows rational shaping of the microstructure in a wide range and, thus, the functional properties of steel.

You are cordially invite to submit your research to our Special Issue. We welcome all high-quality papers related to methods of improvement of strength, cyclic properties and fracture toughness of steel, the stability of microstructures, the possible application of new (or improved) alloys, and the use of treatment for alloy improvement, in particular in the following topics: Modeling; Unconventional heat treatment; Heat treatment; Microstructure; Mechanical properties; Thermomechanical treatment; Precipitates and phase(s).

### Guest Editors

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### Deadline for manuscript submissions

closed (30 April 2021)



## Crystals

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## About the Journal

### 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.

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### Editor-in-Chief

Prof. Dr. Alessandra Toncelli

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