

Special Issue

Fatigue-Challenge of Structural Integrity

Message from the Guest Editors

Fatigue is one of the most common failure modes of engineering materials and structures. The strength theory of mechanical structure based on fatigue research has been gradually developed, promoting the design of engineering structures from empirical to safety methods. With the increasingly stringent service conditions, such as high temperature, high pressure, and corrosion in the field of aerospace, electric power, etc. the structural integrity of advanced structures and components faces more severe challenges.

Fatigue research is generally divided into low-cycle fatigue, high-cycle fatigue, multiaxial fatigue, corrosion fatigue, etc. The research contents generally include advanced testing and characterization methods, manufacturing and processing routes, constitutive models, etc. Therefore, fatigue research is of great importance to ensure the long-life and safe service of engineering structures.

This Special Issue aims to present the latest research progress in the fatigue of engineering structures and materials. Research, review articles, and short communications related to the above-mentioned topics are encouraged.

Guest Editors

Dr. Bingbing Li

Dr. Xiaofeng Guo

Dr. Bo Xiao

Dr. Wei Zhang

Deadline for manuscript submissions

closed (30 July 2023)



Crystals

an Open Access Journal
by MDPI

Impact Factor 2.4
CiteScore 5.0



mdpi.com/si/125799

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

[mdpi.com/journal/
crystals](https://mdpi.com/journal/crystals)





Crystals

an Open Access Journal
by MDPI

Impact Factor 2.4
CiteScore 5.0



[mdpi.com/journal/
crystals](https://mdpi.com/journal/crystals)



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.

Editor-in-Chief

Prof. Dr. Alessandra Toncelli

Department of Physics, University of Pisa, 56126 Pisa, PI, 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), Inspec, Ei Compendex, CAPus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Crystallography) / CiteScore - Q2 (Condensed Matter Physics)