

## Special Issue

# Fatigue and Fracture of Anisotropic Materials

### Message from the Guest Editors

The mechanical response of anisotropic materials is closely related to their microstructure, loading conditions, and service environment. Over the past few decades, there has been extensive reporting on the anisotropic mechanics and deformation behaviours exhibited by crystal materials. However, most of the current research primarily concentrates on common mechanical properties and deformation. There is a lack of research on the mechanical behaviour of anisotropic materials in complex mechanical environments, especially in clarifying fracture, fatigue crack propagation, fatigue damage, and failure mechanisms through advanced characterization methods and numerical analysis models.

It is with great pleasure and enthusiasm that we introduce this Special Issue dedicated to the exploration of "Fatigue and Fracture of Anisotropic Materials". As the guest editors of this issue, we would like to extend our warmest welcome to all contributors and readers who share our passion for advancing our understanding of the complex mechanical behaviours of anisotropic materials.

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### Guest Editors

Dr. Zheng Liu  
Prof. Dr. Xin Wang  
Dr. Shengkun Wang

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### Deadline for manuscript submissions

closed (30 June 2024)



## Crystals

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*Crystals*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[crystals@mdpi.com](mailto:crystals@mdpi.com)

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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  
Department of Physics, University of Pisa, 56126 Pisa, PI, Italy

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