

## Special Issue

# Advances in Fracture Mechanics and Fatigue of Engineering Materials and Structures

### Message from the Guest Editors

Most failures of engineering structures can be ascribed to fracture and fatigue phenomena. Therefore, a deep knowledge of fatigue and fracture behaviour of materials and structural elements is crucial to improve their durability and safety. The development of new materials, such as composite and additively manufactured materials, has prompted many researchers to investigate new approaches for residual life prediction under constant and variable amplitude loading conditions. Moreover, the widespread use of joining techniques requires specific methodologies for simulating fracture response in order to satisfy safety requirements. The focus of the present Special Issue of *Materials* is on the computational modelling and simulation of fatigue and fracture of engineering components and assemblies and on the investigation of their experimental behaviour. This Special Issue will offer an opportunity for the presentation of recent advances in this field.

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### Guest Editors

Dr. Michele Perrella  
Prof. Dr. Enrico Armentani  
Prof. Dr. Gabriele Cricri

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### Deadline for manuscript submissions

closed (31 December 2023)



## Materials

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### Message from the Editorial Board

*Materials* (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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