

## Special Issue

# Fracture Mechanics and Fatigue Damage of Materials and Structures

### Message from the Guest Editors

One of the most important aspects of engineering assessment of the technical condition of structures and materials is the ability to assess the fatigue behavior of materials and structures. On the other hand, an important topic is the design of a material or structures to resist fatigue and fracture. Modern science provides us with an increasing amount of new materials, from superalloys of metals manufactured conventionally as well as by additive manufacturing to functionally advanced composites. Against this background, the fundamental knowledge of the fatigue behavior and fracture mechanics of different material groups provides a convenient platform for communication between different interested groups and fields: from material scientists, numerical engineers and mathematical modeling to hybrid methods for fatigue life prediction.

#### Keywords

- fatigue crack
- fatigue
- fracture mechanics
- failure analysis
- damage modeling
- FEM analysis of cracks
- defects
- metals
- composites

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### Deadline for manuscript submissions

closed (20 May 2023)



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