



Fatigue-Challenge of Structural Integrity

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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.





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Message from the Editor-in-Chief

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