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Study on Cyclic Mechanical Behaviors of Materials

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Deadline for manuscript submissions:
closed (30 November 2021)

Message from the Guest Editors

Dear Colleagues,

The increasing demand for high-performance construction materials evokes the development of adequate constitutive modeling, as well as the appropriate predictions of the overall failure mechanisms under complex thermo-mechanical loads. Fatigue, resulting from cyclic loading, is one of the most common and important phenomena encountered in mechanical structures for different industrial applications. A correct prediction of this phenomenon is usually closely related to safety in addition to economic aspects.

Cyclic loads apply to a majority of structural elements. At the same time, the analysis of fatigue problems is much more complicated than the research related to monotonic loads. Difficulties arise from the large number of cycles resulting in the accumulation of various effects and tedious numerical calculations.

This Special Issue aims to present the latest achievements in the field of fatigue. We invite researchers to submit original research papers and review articles on the cyclic behaviors of various materials, including metals and geomaterials. Both experimental and theoretical studies related to different aspects of fatigue are warmly welcome.

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Message from the Editor-in-Chief

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