Special Issue

Reliability Assessment of Light Weight Components

Message from the Guest Editors

Meeting the challenges in structural integrity is the focus of research articles within the Special Issue “Reliability Assessment of Light-Weight Components”. The issue aims at a broad coverage of structural integrity issues, including material characterization from the fatigue and fracture point of view, numerical modelling of those phenomena in materials and structural applications, failure analysis methodologies and structural integrity evaluation criteria. Topics of research articles can include, but are not limited to:

- reliability and integrity of metallic components and structures
- structural integrity issues for welded and additive manufactured components and structures
- probabilistic approaches to damage tolerance assessment
- fatigue life prediction methodologies for metallic components and structures
- surface engineering approaches and failure resistance improvement
- durability and life extension of metallic components and structures
- life extension and repair of metallic components and structures
- advanced testing and evaluation techniques
- advances in fracture mechanical analysis

Guest Editors

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Deadline for manuscript submissions

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About the Journal

Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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