

Special Issue

Fatigue Crack Growth in Metallic Materials (Volume II)

Message from the Guest Editors

Design against fatigue is fundamental in components submitted to cyclic loads. The damage tolerance approach assumes the presence of small cracks and the propagation life is used to define inspection intervals. The ability to accurately predict fatigue crack growth rates is therefore fundamental. Despite the significant research developed in the last several decades, further work is needed to understand the fundamental mechanisms and to accurately model fatigue crack growth. The coexistence of ductile and brittle mechanisms, and crack tip shielding are not totally understood. The appearance of new metallic alloys, the development of new technologies such as additive manufacturing introduces challenging complexities. On the other hand, the development of numerical and experimental tools gives opportunity for a better understanding of the phenomenon. We invite researchers to submit papers focused on the study of fatigue crack growth in metallic materials. The study of fundamental mechanisms and crack driving parameters, the development of new models and equipment, and the application to real components and structures are welcome. Both original and review papers are welcome.

Guest Editors

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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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