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## Advances in Fatigue Crack Growth of Metals and Their Alloys

Guest Editor:

**Dr. Xijia Wu**

Structures and Materials  
Performance Laboratory,  
Aerospace Research Center,  
National Research Council,  
Ottawa, ON K1A 0R6, Canada

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### Message from the Guest Editor

Fatigue crack growth is an important research area, the results of which have been applied in damage tolerance design to ensure the structural integrity of operating engineering platforms. Since Paris observed and proposed a fatigue crack growth rate law based on the linear elastic fracture mechanics concept in 1960, significant advances have been achieved. Notably, non-destructive inspection and high-resolution imaging techniques have been advanced to allow for the early and reliable detection of cracks, enabling researchers to study crack growth and behavior in more detail. Computational modeling has gone into great detail to perform more complex simulations of fatigue crack growth using finite element analysis and other computational methods. Materials development under the concept of damage tolerance design has led to new materials that are more resistant to fatigue cracking.

This Special Issue welcomes researchers to disseminate their research results on the above issues in an open access environment. This will facilitate information exchange and hopefully deepen our understanding of real fatigue crack growth processes for holistic damage-tolerant structural integrity.



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### Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

## Message from the Editor-in-Chief

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Materials Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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