metals

an Open Access Journal by MDPI

IMPACT FACTOR 2.9

CITESCORE 4.4

Fatigue of Intermetallics

Guest Editor:

Prof. Dr. Gilbert Hénaff
ISAE-ENSMA, Institut Pprime, Département Physique et Mécanique des Matériaux, UPR 3346 CNRS ENSMA Université de Poitiers, Ecole Nationale Supérieure de Mécanique et d'Aérotechnique, Téléport 2, 1 Avenue Clément Ader, BP 40109, F-86961 Futuroscope Chasseneuil, France

Deadline for manuscript submissions:
closed (30 April 2018)

Message from the Guest Editor

Dear Colleagues,

Intermetallic compounds, typically titanium aluminides, are now actual structural materials in the automotive and aerospace industries. The control of the fatigue strength of these materials is, therefore, a major challenge in order to ensure the integrity of components. This aim of this Special Issue is to present a review of the latest advances in the various aspects of fatigue of intermetallics. We invite contributions on topics that include, but are not limited to:

- Cyclic deformation mechanisms in relation with microstructure;
- Crack initiation;
- Crack propagation;
- Environmental effects on fatigue resistance;
- Creep-fatigue
- Thermo-mechanical fatigue;
- Influence of processing (casting, forging, powder metallurgy, additive manufacturing, etc.) on fatigue strength;
- Specific fatigue design methods and life prognosis.

Prof. Dr. Gilbert Hénaff
Guest Editor

metals

IMPACT FACTOR 2.9

CITESCORE 4.4

an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Hugo F. Lopez
Department of Materials Science and Engineering, College of Engineering & Applied Science, University of Wisconsin-Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211, USA

Prof. Dr. Yong Zhang
Beijing Advanced Innovation Center of Materials Genome Engineering, State Key Laboratory for Advanced Metals and Materials, University of Science and Technology Beijing, 30 Xueyuan Road, Beijing 100083, China

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.
Journal Rank: JCR - Q2 (*Metallurgy & Metallurgical Engineering*) / CiteScore - Q1 (*Metals and Alloys*)

Contact Us

Metals Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/metals
metals@mdpi.com
𝕏@Metals_MDPI