

Special Issue

Advances in Service Life Evaluation of Metallic and Composite Materials

Message from the Guest Editors

The purpose of this Special Issue is to gather updated information about the advances in service life evaluation and retrofitting of structural joints as key parts of making structures with the reliability and durability desired. The loading scenarios include high-cycle fatigue, low-cycle fatigue, and post-fatigue. Contributions are welcomed regarding our primary interest in the following topics: recent developments about the experimental techniques applied to the estimation of fatigue crack growth rate and deterioration progress; current state of knowledge relating to the geometric effects (notches, fillets, etc.); environmental and physical factors in the progressive lifetime deterioration of structural joints based on theoretical and numerical approaches; and finally, methodology in the suppression of fatigue crack growth and optimization of fatigue resistant structures. However, studies related to any other engineering materials and structures employed in fatigue approaches, fracture mechanics, and experimental techniques are also highly suitable regarding the aims and scope of this Special Issue.

Guest Editors

Dr. Zhi-Yu Wang

Department of Civil Engineering, School of Architecture and Environment, Sichuan University, Chengdu 610065, China

Dr. Takeshi Hanji

Department of Civil and Environmental Engineering, Nagoya University, C1-3(651) Furo-cho, Chikusa-ku, Nagoya-City, Aichi 464-8603, Japan

Deadline for manuscript submissions

closed (20 January 2024)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/137342

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

[mdpi.com/journal/
materials](https://mdpi.com/journal/materials)





Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



[mdpi.com/journal/
materials](https://mdpi.com/journal/materials)



About the Journal

Message from the Editor-in-Chief

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.

Editor-in-Chief

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

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), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) /
CiteScore - Q1 (Condensed Matter Physics)