Special Issue

Fatigue and Fracture of Additively Manufactured Materials

Message from the Guest Editors

This Special Issue focuses on Fatigue and Fracture of Additively Manufactured Materials that can bring together scientists and engineers working in the advanced manufacturing community to openly discuss the state-of-the-art, particularly with potential fatigue and/or fracture responses. It is well-known that such high-freedom fabricated advanced materials and components are necessarily obliged to key large-scale engineering complex structures subjected to complex environment and loading. This topic has been becoming a foundation of technical concern when pushing (hybrid) additive manufacturing processes into load-carrying structures. The depth understanding on damage evolution and modeling can help to qualify safety critical parts and further reduce the uncertainty of the physical system. Therefore, this Special Issue intends to collect contributions that address research studies related to theoretical, numerical and experimental investigations on the fatigue and fracture of advanced materials and structures using additive manufacturing. It is my pleasure to invite you to submit a manuscript for this Special Issue. and

Guest Editors

Prof. Dr. Shengchuan Wu State Key Laboratory of Traction Power, Southwest Jiaotong University, Chengdu 610031, China

Prof. Dr. Guian Qian State Key Laboratory of Nonlinear Mechanics (LNM), Institute of Mechanics, Chinese Academy of Sciences, Beijing 100190, China

Deadline for manuscript submissions

closed (20 June 2022)



an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed



mdpi.com/si/72855

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

mdpi.com/journal/

materials





an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed



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)