



an Open Access Journal by MDPI

Fatigue in Materials Produced by Additive Manufacturing

Guest Editor:

Prof. Dr. Andrea Avanzini

Department of Mechanical and Industrial Engineering, University of Brescia, via Branze 38, 25123 Brescia, Italy

Deadline for manuscript submissions: closed (20 September 2023)

Message from the Guest Editor

Nowadays, additive manufacturing (AM) technologies are an attractive alternative to traditional processes thanks to the possibility of obtaining near-net-shaped complex components for lightweight structures. While the portfolio of new materials and technologies for AM is expanding rapidly, the task of assessing fatigue resistance for AM materials remains particularly challenging due to the number of processing and post-processing parameters involved. Therefore, I would like to invite you to contribute to this Special Issue. The aim of the Special Issue is to show the recent state-of-the-art in this field, providing novel data on fatigue properties of polymers, composites, metal alloys, or new materials, including architected cellular structures, produced by AM.

Research topics of interest include investigations on correlations between the response of materials to cyclic loading and the technology employed, with associated microstructure, defect types, and surface finish. Comparative analysis on the influence of different AM or conventional processing and post-processing routes are also welcome, as well as highly focused reviews or perspective analyses on specific materials.









an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The iournal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and svstems. 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.

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

Contact Us

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