

Special Issue

Non-Destructive Testing of Materials and Parts: Techniques, Case Studies and Practical Applications—2nd Edition

Message from the Guest Editors

This Special Issue intends to act as a forum for the presentation of the latest developments in this field of research and development, as well as for the demonstration of practical application cases of NDT in all industrial areas that can help foster future developments in this interesting subject. The most recent breakthroughs in the development of equipment and instruments by NDT machine manufacturers will play an important role, demonstrating cutting-edge techniques and novel possibilities for its usage in new areas. Emerging technologies should not be disregarded, such as automation, which reduces the need for human operators; augmented reality (AR), which overlays digital information onto the real world; artificial intelligence (AI), which can process NDT data; or even nanotechnology, used for the detection of small defects or flaws, invisible to traditional methods. As Editors of this 2nd Edition Special Issue, it is our pleasure to invite you to submit a manuscript, whether in the form of a research article or a review article. Complete papers, communications, and reviews are all welcome.

Guest Editors

Prof. Dr. Luís Miguel Pereira Durão

Department of Mechanical Engineering, ISEP, Polytechnic of Porto, Porto, Portugal

Prof. Dr. Nuno Calçada Loureiro

Department of Industrial Production Engineering, Instituto Superior de entre Douro e Vouga, Santa Maria da Feira, Portugal

Deadline for manuscript submissions

31 December 2025



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/234284

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)