



Smart Non-destructive Testing and Inspection of Engineering Materials

Guest Editors:

**Dr. Sasan Sattarpanah
Karganroudi**

Department of Mechanical
Engineering, Université du
Québec à Trois-Rivières, Trois-
Rivières, QC, Canada

Dr. Hussein Ibrahim

Energy Intelligence Research and
Innovation Center (CR2ie), 175,
rue De La Vérendrye, Sept-Îles,
QC, Canada

Dr. Hossein Taheri

Department of Manufacturing
Engineering, Georgia Southern
University, Statesboro, GA 30460,
USA

Deadline for manuscript
submissions:

closed (10 September 2023)

Message from the Guest Editors

Dear Colleagues,

Non-destructive testing (NDT) methods are presented to evaluate material properties and components as well as the structural integrity of engineering materials. NDT encompasses inspection techniques that are utilized to detect, characterize, and measure the presence of mechanical damages and identify their mechanisms. NDT aims to increase the reliability of engineering components affordably without damaging the inspected parts. New inspection methods apply artificial intelligence using various sensors' data to evaluate defects and provide a rapid damage assessment.

This Special Issue will compile recent developments in the field of smart NDT and inspection methods. The articles presented in this Special Issue will cover various topics, ranging from, but not limited to, the optimization of NDT and inspection methods, characterization of engineering materials using smart NDT methods, the functionalization of smart inspection methods, 3D geometrical inspection of materials, smart metallurgical inspection methods, among others. Topics are open to engineering materials and characterization for the development of applications.





an Open Access Journal by MDPI

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

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.

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)

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](https://twitter.com/Materials_Mdpi)