

## Special Issue

# Advanced Characterization of Advanced High-Strength Steels for Automotive Applications

### Message from the Guest Editors

This Special Issue entitled, 'Advanced Characterization of Advanced High-Strength Steels for Automotive Applications', explores the in-depth characterization of Advanced High-Strength Steels designed for automotive applications, utilizing advanced characterization techniques such as TEM, APT, XCT, AES, HEXRD, EBSD, and more. It includes thoroughly analyzing the material properties and microstructures found in AHSSs. This Special Issue aims to highlight the latest advancements in techniques for characterizing automotive engineering materials.

Researchers are invited to contribute original research papers and review papers that shed light on the nuanced aspects of AHSSs. Submissions should align with the central theme of advanced characterization. Authors are encouraged to address challenges and opportunities associated with AHSSs, providing valuable insights into the changing terrain of material engineering for the automotive industry. This Special Issue is a platform for sharing knowledge that can contribute to developing more durable, lightweight, and sustainable automotive materials.

### Guest Editors

Prof. Dr. Joseph McDermid

Department of Materials Science and Engineering, McMaster University, Hamilton, ON, Canada

Dr. Bitu Pourbahari

Department of Materials Science and Engineering, McMaster University, Hamilton, ON, Canada

### Deadline for manuscript submissions

closed (20 November 2024)



## Materials

an Open Access Journal  
by MDPI

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/200489](https://mdpi.com/si/200489)

*Materials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[materials@mdpi.com](mailto: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)