

## Special Issue

# Mechanical Properties of Thin Coatings, Composites and Nano Materials

### Message from the Guest Editors

The depth-sensing indentation (DSI) test is widely used technique for determine the mechanical properties of thin coatings and composites materials. This Special Issue will focus on the methods and procedures that can be used in experimental and numerical DSI tests and contribute to the evaluating of the mechanical properties of thin films and composite materials, paying special attention to the nanocomposites, i.e., those reinforced by nanoparticles, nanotubes, or nanofibers. Furthermore, the aim of this Special Issue is to gather recent achievements towards experimental characterization and modelling of the mechanical behaviour of nanocomposites, including but not limiting ones reinforced by carbon nanotubes. The contributions to the modelling and numerical simulation of the mechanical behaviour of carbon and non-carbon nanotubes and nanofibers, which are helpful for the design methodologies to produce nanocomposites, are also welcome.

### Guest Editors

Dr. Jorge M. Antunes

1. Centre for Mechanical Engineering, Materials and Processes, Department of Mechanical Engineering Polo II, University of Coimbra, Rua Luís Reis Santos, 3030-788 Coimbra, Portugal
2. Escola Superior de Tecnologia de Abrantes, Instituto Politécnico de Tomar, Rua 17 de Agosto de, 1808-2200 Abrantes, Portugal

Dr. Nataliya A. Sakharova

1. ISEL, Department of Mechanical Engineering, Polytechnic University of Lisbon, Rua Conselheiro Emídio Navarro 1, 1959-007 Lisbon, Portugal
2. CEMMPRE, Centre for Mechanical Engineering, Materials and Processes, Department of Mechanical Engineering Polo II, University of Coimbra, Rua Luís Reis Santos, 3030-788 Coimbra, Portugal

### Deadline for manuscript submissions

closed (20 September 2023)



## Materials

an Open Access Journal  
by MDPI

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/120177](https://mdpi.com/si/120177)

*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)