

## Special Issue

# Flexible Transparent Conductive Films: Design and Applications

### Message from the Guest Editor

Transparent conductive films (TCFs) with a high transparency and high conductivity are essential to the performance of a wide variety of electronic devices. Optoelectronic devices containing TCFs, such as smart watches, bracelets, energy storage, medical electronic devices, touch panels and liquid crystal displays, are used in daily life. Transparent conductive oxides (TCOs) are often used in these optoelectronic devices as the electrodes, the most commonly used within the electronics industry being indium tin oxide (ITO). Its excellent optical transparency and low sheet resistance have extended their use as electrodes in optoelectronic devices, such as solar cell, touch screens and flat panel displays. With the rapid increase in the demand for electronic devices and the development of devices with new features, for example, flexible displays, flexible touch panels, flexible solar cells, flexible transistors and flexible supercapacitors, etc., in order to sustain future demands, various trials must be carried out to develop substitutive films.

---

### Guest Editor

Dr. Cui Ye

Division of Engineering and Applied Science, California Institute of Technology, Pasadena, CA 91125, USA

---

### Deadline for manuscript submissions

closed (20 December 2022)



## Materials

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/116258](https://mdpi.com/si/116258)

*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 Editorial Board

*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.

---

### Editors-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

Prof. Dr. Yuguang Ma

State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

---

### 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)