

## Special Issue

# Sustainable Solar Energy Technologies and Materials for Solar Thermal and Power Generation

### Message from the Guest Editor

Solar energy is considered a renewable energy, and it does not pollute the environment. It can be harnessed by either solar thermal or solar photovoltaic means. Due to the increment in global warming, the use of solar energy technologies is increasing; therefore, new and sustainable technologies are required. However, the selection of new and sustainable solar energy technologies requires extensive knowledge and expertise. Materials play a key role in sustainable development, and the proper study of solar thermal and solar photovoltaic materials required for sustainable development is required. This Special Issue will cover new findings related to materials used in solar thermal and photovoltaic technologies (solar water heating, solar drying, solar thermal power generation, solar photovoltaic power generation, solar architecture, solar hybrid PV/T systems etc.). It will reveal new and critical findings in solar thermal and solar photovoltaic technologies for the sustainable development of humanity. Manuscripts describing new experimental and theoretical studies in these fields are highly welcome in this Special Issue.

### Guest Editor

Dr. Hitesh Panchal

Mechanical Engineering Department, Government Engineering College, Patan 384265, India

### Deadline for manuscript submissions

closed (10 March 2023)



## Materials

an Open Access Journal  
by MDPI

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/124157](https://mdpi.com/si/124157)

*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)