

## Special Issue

# Graphene/Carbon Nanotubes Application in Solar Cells

### Message from the Guest Editor

The production of new methods to create the energy required for society is critically important for the future. Continuous use of fossil fuels would cause significant environmental issues. One important option is the development of new, so-called third generation, photovoltaic devices or solar cells. Some of the challenges for these devices include attaining high efficiencies that are stable for long times, making cells that have areas high enough to be commercially relevant, maximising deployment opportunities by making flexible, lightweight cells and developing reproducible production methods that will keep device costs low. Many of these challenges can be addressed with the use of nanocarbons, such as carbon nanotubes, graphene, graphene oxide or reduced graphene oxide. These materials have been used in every component of various devices and have shown many very promising results. It is my pleasure to invite you to submit contributions that address some of the key challenges through the use of nanocarbons in the development of new photovoltaics devices, including, but not limited to, organophotovoltaic cells, perovskite cells and dye sensitised cells.

---

### Guest Editor

Prof. Joe Shapter

School of Chemical and Physical Sciences, Flinders University, Sturt Road, Bedford Park, South Australia 5042, Australia

---

### Deadline for manuscript submissions

closed (31 March 2018)



# Materials

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.2

CiteScore 6.4

Indexed in PubMed



[mdpi.com/si/10051](http://mdpi.com/si/10051)

*Materials*

Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
materials@mdpi.com

[mdpi.com/journal/  
materials](http://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](http://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)

