Special Issue

Advances in Sustainable Energy Materials and Devices

Message from the Guest Editors

Modern human activities are strongly associated with energy availability. However, high demands for energy have exceeded conventional energy resources (such as fossil fuels) and increased pollution, leading to risks centered around greenhouse gas emissions and global poverty. Such challenges stimulate interests in sustainable and clean energy generation and storage systems, which can be envisaged and guided using a variety of materials, resources, and technologies. Some renewable energy harvesting can be designed and implemented using smart techniques and lightweight materials. For instance, batteries can be thermally managed for clean energy storage and smart organic materials can be used for sustainability. Our Special Issue will showcase investigations centered around the development and bridging of sustainable energy technologies. Original research findings in this field will be reviewed and organized to shed light on the benefits of these recent developments, and to provide a critical analysis of current state-of-the-art technologies. All articles featured in this Special Issue will be free to view to maximize readability and benefit the public.

Guest Editors

Dr. Mansour Al Qubeissi

Department of Mechanical Engineering, College of Engineering and Technology, University of Doha for Science and Technology, Doha 24449. Qatar

Prof. Dr. Awni Al-Otoom

College of Engineering and Technology, University of Doha for Science and Technology, Doha 24449, Qatar

Deadline for manuscript submissions

closed (20 August 2025)



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/188903

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

mdpi.com/journal/materials





an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed





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

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
 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)