

Coatings for Energy Efficient Buildings

Guest Editors:

Dr. Tariq Sajjad

School of Engineering, London
South Bank University, London
SE1 0AA, UK

Dr. Imalka Jayawardena

Nanoelectronics Centre,
Advanced Technology Institute,
University of Surrey, Guildford
GU2 7XH, UK

Dr. Babar Shumaila

Centre for Engineering Materials,
Department of Mechanical
Engineering Sciences, University
of Surrey, Guildford GU2 7XH, UK

Message from the Guest Editors

There has been an alarming increase in atmospheric CO₂ content recently, mainly due to the use of fossil fuels for energy generation. While a significant portion of this CO₂ is associated with the transport sector, the building sector also accounts for a large portion of energy use. This can be done by using renewable energy sources for power generation for the building sector, replacing the conventional building materials with photovoltaic materials or coating the windows to improve its heat transmittance and insulation efficiency as well as integrating emerging energy harvesting technologies such as triboelectricity. In this Special Issue, we are inviting papers related to coatings for energy efficient buildings.

In particular, the topics of interest include but are not limited to:

- Building integrated photovoltaics (BIPVs);
- Thermochromic and electrochromic coating for smart windows;
- Smart lighting for buildings;
- Coatings for energy harvesting (triboelectricity, thermoelectricity, piezoelectricity).

Deadline for manuscript
submissions:
closed (31 October 2022)



mdpi.com/si/84677

Special Issue

Editors-in-Chief

Prof. Dr. Wei Pan

State Key Laboratory of New
Ceramics and Fine Processing,
School of Materials Science &
Engineering, Tsinghua University,
Beijing 100084, China

Dr. Emerson Coy

NanoBioMedical Centre, Adam
Mickiewicz University in Poznań,
ul. Wszechnicy Piastowskiej 3, 61-
614 Poznań, Poland

Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

Coatings is a well-established, peerreviewed, online journal dedicated to the vibrant field of surface science and engineering. Coatings publishes original research articles that report cutting-edge results and review papers that make the point on the hottest research topics.

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), Inspec, Ei Compendex, CAPus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (Physics, Applied) / CiteScore - Q2 (Surfaces, Coatings and Films)

Contact Us

Coatings Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/coatings
coatings@mdpi.com
X@Coatings_MDPI