Special Issue

Current Trends in Coatings for Gas Sensors

Message from the Guest Editors

The use of film-coated devices for monitoring gaseous pollutants in indoor and outdoor environments such as volatile organic compounds (VOCs) and carbon monoxide, ammonia, nitrogen dioxide, sulfur dioxide, carbon dioxide, methane, and hydrogen sulfide are widely deployed for this purpose. Efforts are being made to improve the performance of these air quality sensors. Current trends in gas sensing have recently received increased attention due to climate change. Global air quality is closely linked to the Earth's climate and ecosystems. This Special Issue considers strategies for simultaneously reducing these emissions and improving air quality monitoring in living and working environments. It is important to reduce the burden of disease-related health problems caused by these harmful and dangerous air pollutants. In particular, the topics of interest include, but are not limited to:

- Sensors.
- Nano- and/or micro-scale multiphysics devices for gas detection and monitoring.
- Miniaturized novel chemical sensors.
- Biosensors and electronic nose.
- Electrical transducers.
- Gas sensing principle.

Guest Editors

Dr. Steven Solethu Nkosi

Department of Physics, University of Limpopo, Private Bag X1106, Sovenga 0727, South Africa

Prof. Dr. David Edmond Motaung

Department of Physics, University of the Free State, Bloemfontein, South Africa

Deadline for manuscript submissions

closed (31 October 2024)

Coatings

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.4

mdpi.com/si/168356

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

mdpi.com/journal/coatings

Coatings

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.4

mdpi.com/journal/coatings

About the Journal

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.

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

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, CAPlus / SciFinder, and other databases.

Journal Rank:

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

MDPI