Special Issue

Advanced Thin Films for Opto-Electronic and Photovoltaic Applications

Message from the Guest Editor

Thin films and engineered surfaces have a huge potential in the realization of electrical-to-optical and optical-to-electrical transducers. New inorganic and organic optical materials, semiconductors, smart materials, nanostructures, nanocarbon, nanotubes, graphene, bioinspired and ecofriendly materials, perovskites, and related hybrid materials could be prepared as thin films with high optical quality, thus finding application in light-emitting devices, solar cells, flexible and stretchable devices, etc. Different film production strategies, including "drv" and "wet" deposition methods, are developed and optimized. Particular care is devoted to large-area deposition, high resolution patterning, solution-processing and printing, self-assembly and related fabrication techniques and emerging more environmentally friendly technologies which do not employ hazardous chemicals. This Special Issue aims to cover recent trends and latest research advances in the field of thin film production. characterization and application to photonics, optical sensing, and solar and green energy production.

Guest Editor

Dr. Barbara Vercelli

Institute of Condensed Matter Chemistry and Technologies for Energy, National Research Council, CNR-ICMATE, Via Cozzi, 53-20125 Milan, Italy

Deadline for manuscript submissions

closed (31 October 2021)



an Open Access Journal by MDPI

Impact Factor 2.9 CiteScore 5.0



mdpi.com/si/34394

Coatings 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 2.9 CiteScore 5.0



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

Editors-in-Chief

topics.

Prof. Dr. Wei Pan

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

papers that make the point on the hottest research

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, CAPlus / SciFinder, and other databases.

Journal Rank:

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