



Advanced Thin Films for Opto-Electronic and Photovoltaic Applications

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)

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 “dry” 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.





an Open Access Journal by MDPI

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, CAPlus / 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