

## Special Issue

# Advanced Strategies in Thin Film Engineering by Magnetron Sputtering

### Message from the Guest Editors

Recent years have witnessed the flourishing of numerous novel strategies based on the magnetron sputtering technique aimed at the advanced engineering of thin films, such as HiPIMS, combined vacuum processes, the implementation of complex precursor gases or the inclusion of particle guns in the reactor. At the forefront of these approaches, investigations focused on nanostructured coatings appear today as one of the priorities in many scientific and technological communities: The science behind them appears in most of the cases as a "terra incognita", fascinating both the fundamentalist, who imagines new concepts, and the experimenter, who can create and study new films with as of yet unprecedented performances.

These scientific and technological challenges, along with the existence of numerous scientific issues that have yet to be clarified in classical magnetron sputtering depositions (e.g., process control and stability, nanostructuring mechanisms, connection between film morphology and properties or upscaling procedures) have motivated us to edit a specialized volume containing the state-of-the-art that put together these innovative fundamental and applied research topics.

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### Guest Editors

Prof. Dr. Alberto Palmero

Spanish Council of Research (CSIC), Institute of Materials Science of Seville (CSIC/US), Américo Vespucio 49, 41092 Seville, Spain

Prof. Dr. Nicolas Martin

FEMTO-ST Institute, University of Bourgogne Franche-Comté, 15B avenue des montboucons, 25030 Besancon Cedex, France

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### Deadline for manuscript submissions

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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[coatings@mdpi.com](mailto:coatings@mdpi.com)

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## 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.

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### 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

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