# Special Issue

# Epitaxial Strain Engineering in Functional Oxides

### Message from the Guest Editor

The epitaxial growth of functional oxides on mismatched substrates has become a versatile technique to reproducibly tune their microstructure and properties, either enhancing their functionalities or inducing novel properties which are absent in the bulk. Interesting examples are found in the control of the magnetic and electrical behavior of some perovskites. Although research on epitaxial strain engineering has been extensive over the last two decades, scientific activity in this field remains very active both at the theoretical and experimental level. This revival has been caused by recently discovered materials, methods, and phenomena, such as the stabilization of non-equilibrium phases, DFT prediction of strain-induced multiferroic states, increased conductivity in electronic and ionic conductors, self-organization in nanocomposites, two-dimensional electron gases at epitaxial interfaces, interactions between strain and stoichiometry, or new models accounting for the relaxation of epitaxial stress. This Special Issue is open to original contributions in a wide variety of topics related to epitaxial strain engineering in thin films and heterostructures of functional oxides.

### Guest Editor

Dr. José A Pardo
Dept. of Materials Science and Engineering & Institute of Nanoscience of Aragón, University of Zaragoza, Zaragoza, Spain

### Deadline for manuscript submissions

closed (31 October 2021)

## Coatings

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.4

mdpi.com/si/32860

*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), Ei Compendex, CAPlus / SciFinder, and other databases.

### Journal Rank:

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

MDPI