

Special Issue

Recent Advances in Magnetron Sputtering for Functional Films and Coatings

Message from the Guest Editor

This Special Issue aims to bring together recent research efforts focused on the design, synthesis, and application of transparent and chromogenic thin films. Emphasis will be placed on the correlation between deposition parameters, material structure, and functional properties, with particular interest in systems enabling dynamic modulation and high-temperature durability. Topics of interest include, but are not limited to, the following areas:

- Magnetron sputtered TCOs and doped oxide coatings;
- Diamond films synthesized by MPCVD or other techniques for optical/electronic functions;
- Thermochromic, electrochromic, and photochromic oxide films;
- Multilayer structures enabling active modulation of transmittance or conductivity;
- Plasma-enhanced or hybrid deposition processes;
- In-situ diagnostics and post-annealing strategies for phase tuning;
- Durability, stability, and switching kinetics of chromogenic films;
- Coatings for energy-efficient, high-transparency applications;
- Device integration of smart optical films.

Guest Editor

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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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