

## Thin Films and Nanostructures for Electronics

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### Message from the Guest Editor

Dear Colleagues,

The world of thin films is seeing continuous growth. In the modern era, it is difficult to look around you without seeing at least one device that uses thin-film technology. The recent strong development of AI hardware is pushing the boundaries of these applications even further. Thin films still have a role to play in energy harvesting and management, bio-based and medical devices, heterogeneous catalysis, functionalized coatings and general miniaturized electronics.

This Special Issue aims to bring together recent experimental and theoretical findings related to thin and ultra-thin films, as well as various nanostructures with direct applications in future electronics. Discovery of a new structure or material at the nanoscale must always be accompanied by understanding of its fundamental working principles, and this is not always trivial in the nanoworld.

Potential topics include, but are not restricted to:

- new nanomaterials for electronics
- functionalized coatings for medical devices
- film based sensors
- memristors/memcapacitors
- electrochemically formed films/structures
- electrocatalysis for enhanced detection



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# Special Issue

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## 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.

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