



## Functional Thin Films: Design, Fabrication and Applications

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### Message from the Guest Editors

sustainable society requires innovative technology where many disciplines interact. Highly functionalized thin films in various devices, such as computers, which were developed mainly for the semiconductor industry in the last century, are now widely used in various fields of our daily life. For example, the touch panel in a mobile phone uses a transparent conductive thin film and an anti-reflection one on the glass substrate. Thus, many products with various thin films make life more comfortable with reduced materials and energy consumption. Many different methods are used to fabricate such thin films, including physical vapor deposition (PVD) such as laser ablation, molecular beam epitaxy, sputtering, as well as chemical processes. Thin film fabrication by chemical processes can usually be achieved in a relatively cheap way compared to PVD methods. The chemical processes are important techniques to prepare thin films and ceramic coatings now and in the future.

This Special Issue of *Coatings* on “Functional Thin Films: Design, Fabrication, and Applications” is intended to cover the most recent and promising advances in functional thin films using the chemical process





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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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