

Advances in Modelling and Simulation of Deposition and Plasma Etching Processes

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Message from the Guest Editors

This Special Issue invites researchers within the field from across the world to publish their latest work. As such, the Special Issue may also be seen as a comprehensive compendium for scholars interested in pursuing computational research in deposition and plasma etching, and as a resource for industries looking for experts in the field.

In particular, the scope of this Special Issue includes—but is not limited to—the following: computational studies concerning any scale or more than one scale (multiscale modeling) in deposition (CVD, PVD, ALD, electrodeposition, plasma, etc.) and etching (ALE, plasma, etc.) reactors; transport phenomena (mass, momentum, energy) and chemical kinetics in the gas phase or on the surface, where deposition or etching takes place. Studies considered for publication in this Special Issue may be based on Monte Carlo/kinetic Monte Carlo, ab initio, continuum, empirical, or machine learning models. Additionally, we encourage the submission of papers engaging with a comparison of measurements for the validation of model results and the combination of physical modeling with machine learning models.



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Special Issue

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Message from the Editorial Board

Now more than ever, research is called for to produce technologies and improve knowledge 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 at the center of most contemporary research. Surface science and engineering play a key role in this regard. Refining surfaces and their modifications provides new materials, architectures and processes with a huge potential to aid most societal challenges. *Coatings* is a well-established, peer-reviewed, online journal that focuses on the dissemination of publications in the field of surface science and engineering. *Coatings* publishes original research articles that report cutting-edge results and review papers on the hottest topics.

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