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Recent Developments in Surface Modification of Wood Materials

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Message from the Guest Editors

Dear Colleagues,

Wood has been used as a construction material for centuries. Today, wood attracts increasingly more attention because it is a renewable material with a wide area of applications. Furthermore, the shortcomings of wood can be overcome, and its properties can be enhanced using several modern technologies, including plasma treatment.

The goal of this Special Issue is to provide new findings in surface modification of wood and lignocellulosic materials and surface deposition technology. Emphasis is also placed on the current state of knowledge on the plasma reactors and techniques that could be used for wood treatment.

In particular, the topics of interest include but are not limited to the following:

- Surface treatment of wood;
- Plasma surface preparation and texturing techniques;
- Plasma functionalization of wood and other lignocellulosic material surfaces;
- Wettability of wood and wood-based materials and their treated surfaces;
- Plasma deposition of the coating on lignocellulosic materials;
- Wood protection.



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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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