



Nanotechnology and Wood Science

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Message from the Guest Editor

Dear Colleagues,

Employing nanotechnology on wood can result in a next generation of products having hyper-performance and superior service ability when used in severe environments, since it is well known that the cell wall of wood exhibits porosity of molecular scale dimensions due to the partial filling of space between the cellulose microfibrils by lignin, hemicelluloses and extractives. The small size nanoparticles of such nanotechnology compounds can deeply penetrate into the wood, effectively alter its surface chemistry, and result in a high protection against moisture and decay. This Special Issue, Nanotechnology and Wood Science, seeks high-quality works and topics focusing on the latest approaches on the development and applications of nanomaterials to both solid wood and wood products to enhance their properties.

Assoc. Prof. Dr. Antonios Papadopoulos
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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal-organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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