Special Issue

Innovative Approaches for Machining Technologies of Composite Materials

Message from the Guest Editors

Nowadays, composite materials technology is being increasingly used in industries such as automotives and aerospace. Besides, machining is one of the most important manufacturing technologies. With the technological developments followed by the transition to Industry 4.0, innovative techniques such as artificial intelligence and robotic systems could be fused together, in order to achieve better results and a greater quality of these processes. Research works related on the following aspects are welcome:

- Data-driven techniques or physics-based/mathematical modeling for the machining of composite materials;
- AI solutions for defect detection (e.g., delamination, tool wear detection, Remaining Useful Life (RUL), etc.);
- Techniques for the optimization of process parameters for innovative composite materials;
- Robotic systems for composite materials machining;
- Real-time process monitoring and closed-loop process control;
- Advanced cutting tools (materials, geometry and coatings);
- Machining of bio-composites

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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