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Advanced Composite Materials: Microstructures and Mechanical Properties

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Message from the Guest Editors

Dear Colleagues,

The rapid advancement of design and manufacturing technologies related to composite materials with excellent characteristics, including fiber-reinforced composites, nanocomposites, bio-composites, green/eco-composites, energy composites, and composites mimicking natural materials, etc., continues to provide increasingly extensive and important applications in a wide range of engineering fields. In particular, the use of carbon fiber composites in aerospace has been increasing due to their high specific strength and moduli. To be successfully applied in engineering, it is essential that a wide range of mechanical properties of composites are prefabricated, characterized, and analyzed theoretically. Therefore, the controllable design and intrinsic mechanisms of microstructures of composites with specific functions have also gained abundant attention research and shown great promise for use in engineering applications. To this end, this Special Issue aims collect and publish these valuable analytical, experimental, or computational research works regarding the mechanical properties of any kind of advanced composite material relevant to microstructure.









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Editor-in-Chief

Message from the Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy 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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