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Numerical Modeling and Dynamic Analysis of Composite Materials

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Message from the Guest Editors

Dear Colleagues,

In modern day applications across various industries, such as aerospace, electronics, medical and military, composite materials have risen to prominence as the preferred choice. These materials offer a diverse range of possibilities as they can be tailored, both in terms of type as well as scale, by altering the matrix material and the reinforcement or fillers. This flexibility, however, presents engineers and designers with numerous challenges in achieving the desired mix of mechanical, tribological, electrical, and corrosion-resistant properties.

To address these complexities, computational tools have emerged as invaluable aids. These tools empower designers to optimize the ideal combination of factors such as fiber volume fraction, filler volume fraction, and particle size and dispersion, while ensuring the desired directional properties of the resulting materials.

The objective of this Special Issue is to unify the advanced numerical and analytical methodologies used to understand the characteristics of diverse composite materials under a single comprehensive framework, offering immense value to the scientific community and the industry at large

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Message from the Editor-in-Chief

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