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Design and Manufacturing of Bioinspired Material and Structures

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Message from the Guest Editors

Dear Colleagues,

Biomimetic design and manufacturing promote possibilities in manipulating and mimicking the multiscale, multimaterial. and multifunctional structures excellent acoustical. optical. electrical. thermal mechanical, and hydrodynamic properties, to name but a few examples.

The aim of this SI is to understand the basic design principles and physical/chemical mechanisms that determine optimized structural organization in biological systems and its relationship to function. Moreover, based on the identified physical/chemical principle, we wish to investigate pathways for the synthesis and manufacturing of biomimetic materials and structures. This SI will focus on research advances in the areas of bioinspired advanced design and manufacturing of functional structures and materials for future engineering systems. The growth of bioinspired design and manufacturing technology will open intriguing perspectives for developing materials and structures on the basis of novel manufacturing processes together with new computer-aided design and simulation methods.

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Message from the Editor-in-Chief

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