



## Architected Composites for Novel Properties, Multifunctionality and Sustainability

Guest Editor:

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### Message from the Guest Editor

Architected composites are an exciting new research field. Controlling the microstructure of materials has become an essential approach for producing composite materials with enhanced, novel, and unusual properties. Recent advances in fabrication techniques such as 3D printing, freeze casting, lithography, and self-assembly have enabled the exquisite control of material microarchitecture at different length scales, which bring great opportunities to fabricate architected composites with customized interfaces, functional gradients, and structural hierarchies. However, there are still challenges in understanding the design principle of material architecture, developing novel compositions, maximizing the synergy between material and architecture, and fabricating large-scale samples with small structural features.

Accordingly, this Special Issue seeks to showcase research papers and review articles that focus on (1) the design of material architecture for better and novel properties, (2) the development and use of functional/sustainable materials to produce multifunctional/sustainable composites, and (3) new or improved methods to fabricate architected materials at all length scales.

