

Special Issue

Architected Composites for Novel Properties, Multifunctionality and Sustainability

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.

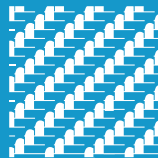
Guest Editor

Dr. Zian Jia

Department of Mechanical Engineering, Virginia Polytechnic Institute of Technology and State University, Blacksburg, VA 24060, USA

Deadline for manuscript submissions

closed (31 August 2022)



Journal of Composites Science

an Open Access Journal
by MDPI

Impact Factor 3.7
CiteScore 5.8



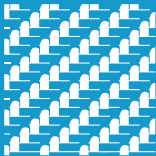
mdpi.com/si/105180

Journal of Composites Science
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
jcs@mdpi.com

mdpi.com/journal/

[jcs](https://jcs.mdpi.com)





Journal of Composites Science

an Open Access Journal
by MDPI

Impact Factor 3.7
CiteScore 5.8



mdpi.com/journal/

[jcs](https://mdpi.com/journal/jcs)



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Dr. Francesco Tornabene
Department of Innovation Engineering, University of Salento, 73100
Lecce, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, ESCI (Web of Science), Inspec, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Materials Science, Composites) / CiteScore - Q1 (Engineering (miscellaneous))