

Special Issue

Advanced Computational Modeling of Composite Structures

Message from the Guest Editors

This Special Issue focuses on advanced technologies and the development of composites. We invite researchers, engineers, and academic scholars worldwide to submit their work to promote innovative progress in computational composite mechanics and the engineering application of composite structures. We welcome both original high-quality research articles and in-depth state-of-the-art reviews. Covered topics include, but are not limited to:

- Progressive damage analysis of composite structures;
- Phase field method-based prediction of mechanical properties of composite materials;
- Discrete-element-method-based simulation and prediction of mechanical behaviors of composites;
- Damage evolution mechanism of composite structures under low-velocity impact loading;
- Fatigue damage evolution and service life prediction for composite materials;
- Data-driven modeling, machine-learning-assisted performance prediction and intelligent design of composites;
- Computational micromechanics and multiscale modeling for composite structures;
- Multi-physics coupling modeling of composite structures under hygro-thermo-mechanical, electro-magneto-thermo-mechanical, and other extreme multi-field service conditions.

Guest Editors

Dr. Zhengqiang Cheng

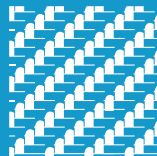
School of Mechanics and Aerospace Engineering, Southwest Jiaotong University, Chengdu, China

Dr. Jianwu Zhou

College of Energy and Power Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing 210016, China

Deadline for manuscript submissions

31 January 2027



Journal of Composites Science

an Open Access Journal
by MDPI

Impact Factor 4.6
CiteScore 6.7



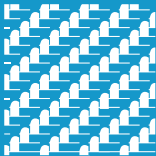
mdpi.com/si/285268

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





Journal of Composites Science

an Open Access Journal
by MDPI

Impact Factor 4.6
CiteScore 6.7



[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, CAPlus / SciFinder, and other databases.

Journal Rank:

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