

## Special Issue

# Advanced Theoretical and Computational Methods for Complex Materials and Structures (Volume 2)

### Message from the Guest Editors

The widespread use of composite materials and structures in many fields of engineering and science has favored the development of advanced theoretical and computational methodologies with increased performance. Among the most commonly used innovative composites, there are functionally graded materials (FGMs), carbon nanotubes (CNTs), graphene nanoplatelets, metamaterials, and smart constituents. Studies on fiber-reinforced composites, FGMs, CNTs, and magnetostrictive and electrostrictive materials, as well as auxetic materials and angle-tow laminates, are welcome, exploring their static, dynamic, buckling and fracturing responses at different scales. Classical and nonclassical theories can be proposed together with multiscale approaches, homogenization techniques and different fracturing models. Contributions regarding theoretical, experimental and numerical aspects from scientists working in mathematics and mechanics, involving different industrial applications, are welcome.

### Guest Editors

Dr. Francesco Tornabene

Department of Innovation Engineering, University of Salento, 73100 Lecce, Italy

Dr. Rossana Dimitri

Department of Innovation Engineering, University of Salento, 73100 Lecce, Italy

### Deadline for manuscript submissions

closed (31 December 2022)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/97875](https://mdpi.com/si/97875)

*Applied Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[appls@mdpi.com](mailto:appls@mdpi.com)

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

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





# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



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



## About the Journal

### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

---

### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,  
20133 Milano, Italy

---

### Author Benefits

#### Open Access:

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

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering )