

Special Issue

Advanced Theoretical and Computational Methods for Complex Materials and Structures

Message from the Guest Editors

In recent decades, composite materials have been increasingly applied in many engineering applications, e.g., aerospace components, aircrafts, boat hulls and sails, car bodies, long span roofs, as well as biomedical prostheses, electronic devices, and drones.

Accordingly, this Special Issue aims at gathering together experts and young researchers in modeling heterogeneous materials and structures at different scales. **Keywords:** Adhesion

Advanced computational methods

Auxetic materials

Buckling behavior

Carbon nanotubes

Complex materials

Composite beams, plates, and shells

Constitutive models

Damage, Delamination, Dynamics

Fracture mechanics

Functionally graded materials

Homogenization techniques

Metamaterials

Nanostructures

Smart materials

Statics

Theoretical, numerical, and experimental strategies

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 January 2020)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/23145

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

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)