



an Open Access Journal by MDPI

Advanced Theoretical and Computational Methods for Complex Materials and Structures

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)

Message from the Guest Editors

Dear Colleagues,

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



mdpi.com/si/23145

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

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

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.

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), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Contact Us

Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](#)