

## Special Issue

# Extreme Sciences and Engineering

### Message from the Guest Editors

This special issue enables transparent, fair, rapid communication of research that highlights the role of mechanics, sciences and engineering in multi-disciplinary areas across materials science, physics, and engineering. Among the topical areas of interest are, but not limited to:

- Materials and components of extreme properties
- Materials and structures under extreme conditions, such as high temperature and high loading rate, natural or man-made hazards, etc.
- Resilience of assets, components, installations and infrastructure systems
- Artificial Intelligence
- Instability, large deformation and large-amplitude vibration in nature and engineering systems
- Interfacial phenomena in interactions between fluids and solids, deformation and failure of materials and structures
- Self-assembly of materials, components and structural systems
- Mechanics of 3D printing
- Earthquakes and Tsunami
- Digital built environments supporting crisis management, resilience recovery, and sustainability of critical infrastructures (Airport, Rail, Port, Energy, Gas, etc.)
- Advanced numerical methods for extreme conditions

### Guest Editors

Dr. Sakdirat Kaewunruen

Birmingham Centre for Railway Research and Education, The University of Birmingham, Edgbaston B152TT, UK

Prof. Dr. Xinzhen Lu

Tsinghua University, Beijing 100084, China

Prof. Dr. Alex M. Remennikov

University of Wollongong, Wollongong, NSW 2522, Australia

### Deadline for manuscript submissions

closed (29 February 2020)



## Applied Sciences

an Open Access Journal  
by MDPI

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/25229](https://mdpi.com/si/25229)

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

[mdpi.com/journal/appls-ci](https://mdpi.com/journal/appls-ci)





# 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 )