Special Issue

Uncertainty Analysis of Mechanical Systems

Message from the Guest Editor

This Special Issue is dedicated to solutions for and discussions of measuring uncertainties in mechanics, stochastic modeling, uncertainty quantification and analysis, modeling, design of systems in the presence of uncertainty. The main topics of interest for this Special Issue include but are not limited to:

- Stochastic processes in energy;
- Reliability and optimal safety factors;
- Stochastic modeling and uncertainty quantification;
- Measuring uncertainties in mechanics;
- Computational methods for the solution of problems in engineering;
- Mathematical models and their numerical solution in all areas of mechanics;
- Uncertainties in solid/structural mechanics;
- Uncertainties in fluid mechanics;
- Uncertainties in multiphysics systems;
- Systems of governed by differential equations, possibly with multiscale features;
- Propagation of uncertainty across scales;
- Bayesian computation and machine learning techniques;
- Stochastic multiscale systems;
- Evolutionary computing-based uncertain optimization methods;
- Modern experiments and modeling approaches;
- Applications of uncertainty quantification in all areas of physical sciences.

Guest Editor

Prof. Dr. Abdelkhalak EL HAMI

Department of Mechanics and PERF-II, National institute on applied sciences INSA- Rouen-Normandy, Normandy University, 14000 Caen, France

Deadline for manuscript submissions

closed (30 June 2021)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/54292

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

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/journal/applsci

MDPI

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)