



## Topological Optimization in Engineering Design

Guest Editor:

### **Dr. Boyan Stefanov Lazarov**

Lawrence Livermore National  
Laboratory, Livermore, CA 94550,  
USA

Deadline for manuscript  
submissions:

**closed (30 October 2021)**

### **Message from the Guest Editor**

Topological optimization is a rapidly growing research area. Initially developed for finding the optimal layout of pure mechanical structures, it was extended later to a number of other engineering disciplines, such as the design of fluid flow, heat transfer, coupled multi-physics, and material-science problems. Nowadays, the technology accounts for uncertainties in the materials and the geometry, stages in the production process, and additional manufacturing requirements. However, despite the fast development, many challenging issues remain open. Therefore, research and review papers are sought in any area advancing or consolidating existing and new knowledge in the general field of topological design and optimization. In addition to applications in the fields mentioned above, example topics include new design and optimization algorithms, software implementations, machine learning applications, novel algorithms linking topology optimization with other optimization methods, alternative discretizations, and fabrication processes.

Dr. Boyan Stefanov Lazarov

*Guest Editor*





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](http://www.mdpi.com)

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