



New Advance of Methods and Applications in Topology Optimization and Symmetry

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Deadline for manuscript
submissions:
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Message from the Guest Editors

Dear Colleagues,

Topology optimization with powerful capabilities to find the optimized layout of materials is being a rapidly growing and remarkably impactful research field that covers a wide variety of engineering fields. It has been successfully applied to study several optimization problems, such as the design of fluid flow, heat transfer, coupled multi-physics, meta-/materials design, design for manufacturing or additive manufacturing and etc... Despite its fast development, several challenging issues still remain skeptical. Meanwhile, symmetry is an essential element in the design and optimization process of structures or materials. Therefore, this Special Issue intends to collect recent research efforts in the area of topology optimization and symmetry. We welcome the submission of high-quality original research and review articles. Potential topics for submissions include, but are not limited to: Isogeometric topology optimization and symmetry; Feature-based topology optimization and symmetry; Multi/full-scale topology optimization; Mechanical metamaterials; Data-driven topology optimization; Educational codes; Topology optimization for multi-physics problems.





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Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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