Special Issue

Novel Approaches and Challenges in Nuclear Fusion Engineering

Message from the Guest Editors

Nuclear fusion, the reaction that powers the Sun and the stars, is expected to be a safe, non-polluting, and virtually limitless energy resource. In the future, it is foreseen that nuclear fusion power plants could spread all over the world into the energy production context, reducing the contribution to electricity coming from fossil fuels and other polluting resources. The achievement of such a goal requires the solution of many challenging problems in a wide range of engineering fields, requiring the discovery of novel solutions and the development of new technologies. This Special Issue aims at collecting scientific and technical manuscripts on the technical and theoretical aspects concerning the most important issues to be faced to design and safely operate a future nuclear fusion power plant.

- Balance of plant in a nuclear fusion facility;
- High-current and high-voltage power supplies;
- High-performance (electric, magnetic, and thermal) energy storage systems;
- Advances in applied superconductivity;
- Safety and reliability issues in nuclear fusion

Guest Editors

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Deadline for manuscript submissions

closed (20 July 2025)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/196615

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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

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