

# Special Issue

## Nuclear Fusion Engineering

### Message from the Guest Editors

The key focus of the Special Issue is to describe the current state of art, emerging technologies, and new technical solutions, under investigation in nuclear fusion engineering, including (but not limiting to) the following key topics:

- Balance of plant in a nuclear fusion facility;
- High-current and high-voltage power supplies;
- Electrical distribution systems for pulsed loads;
- High-performance (electric, magnetic, and thermal) energy storage systems;
- Solutions and layouts for cooling and heat transport;
- Power conversion, power generation, and connection to the external grid;
- The thermo-mechanical design of structural elements and plasma-facing components;
- Advances in applied superconductivity;
- Heating and current drive technologies;
- Nuclear and real-time diagnostics;
- Plasma scenario design, optimization, and control;
- Solutions for power exhaust management;
- Technologies for tritium extraction and fuel cycle;
- Safety and reliability issues in nuclear fusion;
- The design and management of experimental facilities.

### Guest Editors

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### Deadline for manuscript submissions

closed (30 June 2022)



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## 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.

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### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
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