

Special Issue

Novel Approaches and Challenges in Nuclear Fusion Engineering, 2nd Edition

Message from the Guest Editors

Nuclear fusion, the reaction that powers the Sun and the stars, is expected to provide 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 and dominate energy production, reducing the contribution to electricity of fossil fuels and other polluting resources. This Special Issue will showcase scientific and technical manuscripts addressing technical and theoretical aspects of the most important issues that need to be overcome in order to design and safely operate a nuclear fusion power plant.

- Balance of plant in a nuclear fusion facility;
- High-performance (electric, magnetic, and thermal) energy storage systems;
- Advances in applied superconductivity;
- Nuclear and real-time diagnostics;
- Plasma scenarios and equilibrium design, optimization, and control;
- Technologies for tritium extraction and the fuel cycle;
- Safety and reliability issues in nuclear fusion;
- manufacturing processes for nuclear fusion

Guest Editors

Dr. Simone Minucci

Department of Engineering and Sciences, Universitas Mercatorum, 00186 Rome, Italy

Dr. Alessandro Lampasi

Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), 00044 Frascati, Italy

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

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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.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, Italy

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