Special Issue

AI-Driven Advancements in Nuclear Fusion Energy

Message from the Guest Editors

We welcome original research, reviews, and case studies in the following areas:

- AI for Data Validation and Diagnostics;
- AI for Predictive Modelling and Real-Time Control;
- AI for Simulation and Design Optimization;
- Emerging AI Applications in Fusion.

This Special Issue aims to showcase the latest AI-driven advancements in nuclear fusion, highlighting interdisciplinary approaches that pave the way for future collaboration. By focusing on how AI addresses the critical barriers in fusion research, this collection will serve as a foundational resource for researchers working towards a future of safe, sustainable fusion energy.

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Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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