Special Issue

Operation Safety and Simulation of Nuclear Energy Power Plant

Message from the Guest Editors

This Special Issue aims to present and disseminate the most recent advances in the design and operational safety and simulation of nuclear energy power plants. Topics of interest for submission include, but are not limited to, the following: (1) AI-driven simulation technologies; (2) Big data and IoT applications in intelligent operation and maintenance; (3) Prognostics and health management of nuclear safety-critical equipment; (4) System reliability modelling and analysis; (5) Human reliability analysis; (6) Alarm analysis and fault diagnosis; (7) Risk assessment and safety management; (8) Nuclear physics design and reload safety evaluation; (9) Nuclear emergency preparedness and response; (10) Uncertainty quantification and sensitivity analysis; (11) Digitalization and standardization in nuclear applications; (12) Nuclear fuel design and fuel behaviour analysis; (13) Optimization of nuclear fuel performance under extreme operating conditions.

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Deadline for manuscript submissions

closed (5 March 2026)

Energies

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mdpi.com/si/233485

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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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