

Special Issue

Advanced Nuclear Energy Systems: Design and Engineering Innovations

Message from the Guest Editor

This Special Issue aims to provide a platform for showcasing the latest progress in nuclear system design, encouraging cross-disciplinary collaboration and supporting the development of next-generation nuclear technologies. Topics of interest include the following:

- Advanced reactor concepts (SMRs, HTGRs, MSR, fast reactors);
- Core and fuel design innovations;
- Advanced fuel cycle strategies and reprocessing technologies;
- Passive safety systems and self-regulating mechanisms;
- Multi-physics and system-level modeling;
- Thermal-hydraulics and neutronics;
- Materials and structural design for high-performance environments;
- Digital twins and smart reactor technologies;
- Simulation-driven design and engineering methods.

Guest Editor

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Message from the Editor-in-Chief

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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