Special Issue

Advances in Nuclear Engineering Technologies

Message from the Guest Editor

Nuclear engineering is undergoing rapid advancements, enhancing safety, efficiency, and sustainability in energy production. This Special Issue focuses on cutting-edge developments in nuclear technologies, including reactor design, fuel innovations, heat transfer, energy systems. and waste management. As global energy demands increase, nuclear power remains a key low-carbon solution. Innovations such as small modular reactors (SMRs), generation IV systems, and advanced cooling techniques are improving performance and safety. Additionally, research on nuclear fuel cycles, heat transfer mechanisms, and system integration is optimizing energy efficiency while minimizing environmental impact. This Special Issue requests original research articles, reviews, and case studies on advancements in nuclear engineering, including the following:

- Advanced reactor designs (SMRs, generation IV technologies);
- Nuclear fuel cycle innovations and fuel performance;
- Heat transfer and thermal management in nuclear systems;
- Energy system optimization and integration in nuclear power plants;
- Nuclear safety, radiation protection, and waste management strategies.

Guest Editor

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About the Journal

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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