

Special Issue

Advances in Nuclear Thermal and Electric Propulsion

Message from the Guest Editor

This Special Issue explores the forefront of **nuclear thermal propulsion (NTP)** and **nuclear electric propulsion (NEP)**, highlighting innovations set to transform space exploration. NTP uses nuclear reactors to heat propellants for high-efficiency thrust, enabling faster deep-space travel. NEP converts nuclear energy to electricity to power ion or plasma thrusters, delivering sustained propulsion for long-duration missions. Topics include reactor designs, thermal management, fuel safety, materials for extreme environments, power conversion, thruster advancements, mission planning, and economic, environmental, and regulatory aspects. Comparative analyses of NTP and NEP efficiencies and potential auxiliary applications are also covered.

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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