

Special Issue

Modern High-Performance Electronic Systems for Advanced Energy Projects and Large-Scale Research Infrastructures

Message from the Guest Editor

One present-day challenge is sustaining growing energy consumption. Efficient power production technologies are a potential solution to this issue. These require using the most recent achievements from various science branches such as materials, physics, chemistry, or electronics, often with large-scale research infrastructures. Such results are later combined directly with the industrial sector, including energy projects, ensuring the technological progress of energy production. Electronic systems are present almost everywhere, performing various tasks, e.g., control, diagnostics, analysis, or protection. Due to modern high-density integrated circuits, it is possible to design devices that perform multiple simultaneous tasks, offer many processing channels, or work as numerical accelerators. Most recent FPGAs and GPUs provide the very high performance required for advanced research and applications. This Special Issue will present the most recent achievements in complex electronic systems related to concepts, modelling, design, installations, control, monitoring, and diagnostics for advanced energy projects and large-scale research infrastructures.

Guest Editor

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Deadline for manuscript submissions

28 November 2025



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



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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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