

Special Issue

Advances in Transformer Technology: Intelligent Condition Monitoring and New Materials

Message from the Guest Editors

Transformers constitute the heart of the power system. High attention and due emphasis are being laid by transformer owners and utility engineers to optimize the technical and financial aspects of the energy transition. In view of the diversity in the use of condition monitoring technologies, and progress in the use of alternative insulating materials, a careful understanding of the evolving technologies is essential to adapt transformer utilization to the context of the network of the future.

Therefore, this Special Issue aims to combine new trends in transformer digitalization and new materials for improved insulation system performance. Such a combined lecture will be helpful for researchers and engineers to better understand the rapid advancements in technologies that will improve asset management, operational reliability, and safety. Topics of interest for publication include, but are not limited to:

- Transformer modelling, digital twins
- Intelligent condition assessment and monitoring
- Diagnosis and prognosis of power transformers
- New materials to improve transformer performance
- Low pour-point liquids for transformers

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Deadline for manuscript submissions

closed (10 October 2023)



Energies

an Open Access Journal
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Impact Factor 3.2
CiteScore 7.3



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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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