



an Open Access Journal by MDPI

Frontiers in Advanced Power Equipment and Research in Condition Diagnostic and Sensing

Guest Editors:

Prof. Dr. Guoming Ma

State Key Laboratory of Alternate Electrical Power System with Renewable Energy Sources, North China Electric Power University, Beijing 102206, China

Prof. Dr. Jun Jiang

Jiangsu Provincial Key Laboratory of Renewable Energy Generation and Power Conversion, Nanjing University of Aeronautics and Astronautics, Nanjing, China

Dr. Xilin Wang

Shenzhen International Graduate School, Tsinghua University, Shenzhen 518055, China

Deadline for manuscript submissions: closed (28 February 2023)



Message from the Guest Editors

The fast growth of renewable electricity has resulted in new challenges regarding electrical grids. Any failures of the power equipment may lead to a serious blackout. Therefore, there is an urgent demand to develop advanced power equipment and both convenient and low-cost condition diagnostic and sensing methods to ensure the safety of electrical grids.

In this Special Issue, we aim to provide a forum for colleagues to report on the most up-to-date research results regarding the frontiers of advanced power equipment and research in condition diagnostic and sensing fields, as well as comprehensive surveys of state-of-the-art equipment in relevant specific areas.

The topics of interest include but are not limited to:

Novel power equipment structure design, parameter optimization, and implementation; Multi-physics coupling modeling and analysis, including electricity, temperature, and mechanical fields; Multi-functional sensor design and testing; Optical sensors for power equipment detection; MEMS sensors for power equipment detection; Distributed sensing methods; Smart sensing networks; Artificial intelligence-based signal processing algorithms; and Field application cases.







an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: CiteScore - Q1 (Control and Optimization)

Contact Us

Energies Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/energies energies@mdpi.com X@energies_mdpi