Special Issue

Progress and Trends in Fault Diagnosis for Renewable Energies

Message from the Guest Editor

Renewable energy sources like solar, wind, and green hydrogen are essential for reducing reliance on fossil fuels and emissions. In industrial applications, supervision involves monitoring key variables and ensuring fault detection for adaptive control. Key challenges include the complexity of systems, ecological constraints, intermittency, and limited instrumentation. This Special Issue deals with academic and real (or pilot) innovative industrial applications of RES platforms. Topics of interest include, but are not limited to, the following:

- Online monitoring and supervision of RES;
- Fault detection and diagnosis of RES in real operating conditions;
- Artificial intelligence applied to supervision of RES;
- Optimal online control and efficiency tracking of RES;
- Online data-driven and model-based PHM (prognosis and health management);
- Industrial or laboratory applications of supervision (FDI, FTC) systems;
- Integration of knowledge and AI for improving the PHM of RES;
- Dynamic models of industrial RES systems.

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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