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Arc Faults in AC and DC Electrical Networks: Challenges, Detection Approaches, Characterization, Modeling and Diagnosis Methods

Guest Editor:

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Deadline for manuscript submissions: closed (31 December 2021)

Message from the Guest Editor

Dear Colleagues,

In industrial and domestic as well as in aeronautic electrical systems, the initiation and repetition of arc faults can cause damages and even fires. Arc faults are challenging to detect for many civil and military applications in AC and DC electrical networks (PV panels, electrical aircraft, etc.). In particular, among protection strategies, the interest in artificial intelligence and machine learning for arc fault diagnosis application is increasing.

This Special Issue will feature the most recent advances in arc fault characterization and diagnosis, including the development of simulation models, location algorithms, sensing devices, detection strategies, and deep learning approaches.

Potential contributions can include but are not limited to:

- Arc fault safety;
- Arc fault location;
- Arc interruption;
- Simulation model;
- Series arc fault characterization;
- Sensors for arc fault measurement;
- Arc fault dataset.





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Editor-in-Chief

Message from the Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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