Special Issue

Machine Learning Methods in Solar Photovoltaic Applications

Message from the Guest Editor

This Special Issue focuses on new research and the application of machine learning and machine analysis methods for improving the operation and energy production of solar PV systems and supporting their widespread integration into the electrical grid. These issues include but are not limited to:

- Intra-hour, intra-day, and day-ahead solar resource forecasting;
- Intra-hour, intra-day, and day-ahead photovoltaic plant output forecasting;
- PV system fault detection, classification, and localization;
- Sensorless (weather) and data-driven condition monitoring;
- Early PV system degradation detection;
- PV system degradation prediction;
- Automated failure detection and classification from IR thermography and EL measurements;
- PV system power loss prediction from IR and EL measurements.

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Guest Editor

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Message from the Editor-in-Chief

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.

Editor-in-Chief

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