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Performance Analysis of Novel Solar Energy Systems

Guest Editor:

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Message from the Guest Editor

The main purpose of this Special Issue is to bring together original research and review studies on the Performance Analysis of Novel Solar Energy Systems. Research projects should be detailed studies of new systems that present promising outlooks and analyses on the advance and deployment of solar energy systems as one of the most important sources of energy for sustainable development. This Special Issue also covers studies and investigations on thermodynamics-based mathematical modeling and simulation as well as environmental life cycle analysis of these thermal energy systems. The main subsections of this Special Issue are listed as:

- Measurement of solar collector efficiency and of radiation data;
- Photovoltaic and thermo-photovoltaic systems;
- Concentrated solar systems with storage for power production;
- Solar-assisted heat pumps with phase change materials or advanced storage systems;
- Solar collectors in hybrid power plants at multiple scales;
- Storage of solar energy with advanced systems;
- Solar cells and materials;
- Solar biomimetics;
- Novel thermal enhancement techniques in solar systems;
- Solar heating and solar cooling.









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Message from the Editor-in-Chief

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