

Special Issue

Research Trends of Power Electronics Topologies, Modeling, and Control for Photovoltaic Systems

Message from the Guest Editors

To drive these power converters, control methods are used, which work by adjusting desired variables, such as input and/or output voltage levels, output voltage frequency and phase, and/or output current. Many families of control methods have been developed, such as resonant controllers, model predictive control, sliding mode, artificial neural networks, etc, which offer different performance levels, while at the same time, each of these families suffer from some deficiencies. Accordingly, to date, many research efforts are still being carried out in an effort to overcome or limit these deficiencies in their outcomes. This Special Issue is entitled “Research Trends of Power Electronics Topologies, Modeling, and Control for Photovoltaic Systems” and is focused on presenting the latest developments in power converters and their control methods in photovoltaic applications, with particular emphasis on practical applications and problems that occur in real systems.

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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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