Special Issue

Grid Connected Modular Multilevel Converters (MMC) and New Applications

Message from the Guest Editors

Modular multilevel converters (MMC) are a sophisticated technology that was originally designed for very high-power applications. Over time, the scientific community has contributed with new solutions to solve some of its weak points, such as reducing the circulating currents, balancing the capacitor voltages, reducing the computing burden of the control, etc. Further, new control techniques have been developed for MMC, for example, to make the converter work as a current source, or others based on model predictive control, either applied to the internal operation or to the operation of the grid connection. Lately, medium power versions of MMCs are being applied to wind generation, STATCOMs, etc. In addition, new topologies have been investigated to reduce the number of semiconductors or to keep the MMC working under certain types of internal and external faults. Any contribution within the aforementioned topics, and many other related ones, is welcome to this special issue.

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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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