# **Special Issue**

## Optimal Design of Power Converters

## Message from the Guest Editor

With the help of wide bandgap (WBG) power semiconductor switching devices such as SiC and GaN devices in recent times, the dramatic enhancement of power density and efficiency of power converters has become the main issue, resulting in the opening a new era of its applications. In order to meet this recent requirement, the stable operation of WBG devices is being actively researched, and the design of heat dissipation systems and system integration along with passive components are also main research issues. Therefore, this Special Issue focuses on the emerging technologies to meet the recent requirements of power converters for various industry applications, including the following nonexclusive topics:

- Topologies and control algorithms for high efficiency
- Design approaches for high power density
- Design of gate drive circuits, including short circuit protection for WBG devices
- Design procedures of planar typed transformers and inductors
- Heat dissipation systems and system integration, including modeling and simulation techniques

### Guest Editor

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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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