

## Special Issue

# Modeling and Design of Power Converters

### Message from the Guest Editor

Highly efficient and reliable power conversion is of paramount importance in many critical applications. This Special Issue intends to collect the latest research on power topologies and architecture leveraging wide bandgap devices and higher switching frequency magnetic cores. Potential topics include, but are not limited to:

- Application of new power conversion topologies and architectures used in high power computing, transportation electrification, and renewable energy grids.
- Advanced control and modulation methods for emerging power topologies and architecture.
- Advanced power conversion topologies and architectures enabling very high-frequency operation and high-power-density design.
- System-level optimization enabled by new power topologies and architectures. For instance, new power conversion architecture enables integrated onboard chargers for electric vehicles.
- Lifespan, reliability analysis, and modeling for new power topologies and architectures.
- EMI optimization through power topology and architecture innovation.

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### Guest Editor

Dr. Peng Fang

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### Deadline for manuscript submissions

15 July 2025



## Electronics

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## About the Journal

### Message from the Editor-in-Chief

*Electronics* is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

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### Editor-in-Chief

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