Special Issue

Advances in Wireless Power Transfer and Applications

Message from the Guest Editor

Wireless power transfer (WPT) technology focuses on transferring electrical energy without interconnecting wires. As for today, WPT utilizing magnetic and/or electric field for energy transfer are the most studied topics. This Special Issue offers an opportunity for both academic and industrial researchers to exchange the latest results and findings within the subject of near-field wireless power transfer technologies as well as present promising future development directions. The Special Issue topics include, but are not limited to:

- Power converter topologies
- High power systems
- Compensation topologies and parameter tuning
- Loosely coupled transformer analysis and design
- Control strategies
- Modeling and simulation
- Robustness to misalignment
- Stationary and dynamic battery charging systems
- Simultaneous wireless power and data transmission
- SiC/GaN-based systems
- Magnetic design
- EMC issues
- Special applications

Guest Editor

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Deadline for manuscript submissions

closed (10 September 2021)



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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 guestedited by leading experts in selected topics of interest.

Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

