

Special Issue

Applications, Control and Design of Power Electronics Converters

Message from the Guest Editors

Power electronics is a major technology for energy conversion, energy conservation, and high functional energy use. Power semiconductor devices play a vital role in switching operations in power electronic technology. It is basically the application of electronics to the control and conversion of electric power. Power converters are becoming increasingly necessary as more renewable energy harvesting methods are being developed, especially for processing large volumes of power. The following are some very general categories in which the current power electronics research is being conducted:

- Solar and wind energy
- Power quality
- HVDC transmission systems
- Electric vehicles
- Electric machines and drives

There are some evergreen research topics related to power electronics such as renewable integration, harmonic performance of electric drives, predictive control in power electronics, multi-level converters and high-power drives, reliability of power electronics, SiC/GaN devices, filter design, energy storage, etc., solid state transformers, power quality, and many more.

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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.

Editor-in-Chief

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