# Special Issue

# Diagnostics and Fault Tolerance in DC-DC Converters and Related Industrial Electronics Technologies

Message from the Guest Editors

The deployment of DC energy systems is an attractive alternative to conventional AC-based energy distribution systems, improving the efficiency of energy supplies and promoting renewable energies. Within DC energy systems, industrial electronics and particularly DC-DC converters are the key technologies that establish the interface between the multiple individual units of DC energy systems. Semiconductors and electrolytic capacitors, as critical components of DC-DC power converters, are particularly susceptible to suffering faults, which have a critical impact on converter operation. The implementation of diagnostic, prognostic, and fault-tolerant strategies, which are able to effectively deal with the multiple failure modes prone to occurring in DC-DC converters, is a challenging goal and is yet to be fully achieved. This Special Issue focuses on the discussion of emerging solutions suitable for leveraging the availability, reliability, and robustness of DC-DC industrial power electronics technologies.

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## Deadline for manuscript submissions

closed (15 April 2023)



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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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