

Special Issue

Design and Optimization of Energy Harvesting Systems in Electronics

Message from the Guest Editor

Ultra-low power consumption, energy harvesting, and wireless connectivity are technologies that enable the creation of smart devices in which new functions can be integrated. These functions are rapidly gaining interest in many fields of application, like the IoT, IIoT, smart farming, Industry 4.0, and automotives. On one hand, wireless connectivity has allowed for the creation of miniaturized devices able to work in harsh environments and that can be placed in locations not accessible with traditional solutions. On the other hand, wireless devices are usually battery powered and their miniaturization necessitates using smaller energy storage devices, and consequently lead to an unacceptable battery replacement rate for most applications. To overcome this limitation, both industry and academia are working towards the creation of energy-neutral devices. Keywords

- energy harvesting
- smart power management
- energy-aware design
- energy-neutral devices
- self-powered sensors
- hardware–software co-design

Guest Editor

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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 guest-edited by leading experts in selected topics of interest.

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