Special Issue

Advances in Wireless Power Transfer Technologies and Applications

Message from the Guest Editor

Existing Internet of Things (IoT) devices face a significant challenge in terms of power consumption due to their limited battery life. The use of wires and batteries to power such massive number of electrical devices wastes time and is inconvenient and environmentally unfriendly. To maintain the power autonomous devices, diverse wireless power harvesters have been proposed to supply the power from the ambient environment. We welcome emerging and well-established antenna-enabled technologies, such as RFID and RF power transfer, that highlight the inter-disciplinary applications of wireless power harvesters, with a focus on IoT, healthcare, and industrial applications. Potential topics include but are not limited to the following:

- Advanced rectenna designs for sensors;
- Rectifying metasurfaces;
- Simultaneous wireless information and power transmission;
- Soft, flexible, and stretchable rectennas;
- Hybrid energy harvesters;
- Advanced wireless power transmission theory and systems;
- Self-matching and auto-tuning rectennas;
- Advanced materials and metasurfaces with rectifiers.

Guest Editor

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Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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