Special Issue

Wireless Power Transfer Systems: Design and Implementation

Message from the Guest Editor

The rapidly developing topic of wireless power transfer (WPT), a technology with significant implications for a wide range of applications, is examined in this Special Issue; its scope encompasses a wide range of topics within WPT, including, but not limited to, resonant inductive coupling, microwave power transmission, capacitive coupling, and magnetic resonance, each treated with their own benefits and drawbacks. It also covers applications in charging infrastructure for electric vehicles, implantable medical devices, and the Internet of Things (IoT). This Special Issue provides a comprehensive overview of the current state of WPT technology, its challenges, and its potential to revolutionize how we think about power distribution and consumption. Keywords

- wireless power transfer (WPT)
- resonant coupling
- far-field wireless power transfer
- microwave power transfer
- efficiency optimization
- dynamic charging
- metamaterials
- infrastructure integration
- energy harvesting
- wearable and implantable applications

Guest Editor

Dr. Giacomo Paolini

Department of Electrical, Electronic, and Information Engineering (DEI) "G. Marconi", Alma Mater Studiorum—University of Bologna, 40136 Bologna, Italy

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Electronics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
electronics@mdpi.com

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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.

Editor-in-Chief

Prof. Dr. Flavio Canavero
Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

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