Special Issue

Recent Advances in RF Rectifying Technology for EM Energy Harvesting and Wireless Power Transfer

Message from the Guest Editors

Radio frequency (RF) rectifying technology plays a vital role in electromagnetic (EM) energy harvesting and wireless power transfer applications. This Special Issue aims to gather and showcase the latest research and breakthroughs in RF rectifying technology for EM energy harvesting and wireless power transfer. We invite researchers from academia and industry to contribute their original research articles, reviews, and case studies on the following topics but not limited to:

- Novel RF rectifying circuit designs for efficient energy conversion;
- Wideband and broadband rectennas for multi-frequency energy harvesting;
- Adaptive and reconfigurable rectifying systems for enhanced power transfer efficiency;
- Integration of rectifying technology with energy storage devices;
- Efficient rectifying techniques for low-power and IoT applications;
- Optimization approaches for maximizing energy harvesting from RF sources;
- Advanced materials and fabrication techniques for RF rectifiers;
- RF energy harvesting in challenging environments and scenarios;
- Wireless power transfer using RF rectifying metasurface;

Guest Editors

Dr. Chao Gu

Centre for Wireless Innovation, ECIT Institute, Queen's University Belfast, Belfast BT3 9DT, UK

Dr. Zhiwei Zhang

School of Electronics and Information, Hangzhou Dianzi University, Hangzhou 310018, China

Deadline for manuscript submissions

closed (15 March 2025)

Electronics

an Open Access Journal by MDPI

Impact Factor 2.6
CiteScore 6.1

mdpi.com/si/175745

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

mdpi.com/journal/electronics

Electronics

an Open Access Journal by MDPI

Impact Factor 2.6
CiteScore 6.1

mdpi.com/journal/electronics

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

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

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Ei Compendex and other databases.

Journal Rank:

JCR - Q2 (Engineering, Electrical and Electronic) / CiteScore - Q1 (Electrical and Electronic Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).