

## Topical Collection

# Wireless Power Transfer: Material, Technologies, and Applications

### Message from the Collection Editors

We would like to invite you to submit original research and review articles to a Special Issue of the journal *Electronics* on the topic of “Wireless Power Transfer: Material, Technologies, and Applications”. In recent years, Wireless Power Transfer (WPT) technologies have found many successful applications in Medical Electronics, Consumer Electronics, Internet of Things, and Electric Vehicles, etc. It is expected that WPT technologies will be widely applied in more commercial products. However, there are many practical challenges ahead to meet the safety and EMC requirements, particularly for long-distance power transfer at high operating frequencies.

- Inductive Power Transfer (IPT) systems;
- Capacitive Power Transfer (CPT) systems;
- Radiative WPT systems;
- Energy harvesting;
- Ultrasonic power transfer, laser power transfer, infrared power transfer, etc.;
- Electromagnetic compatibility (EMC);
- Foreign object detection (FOD) and living object detection (LOD) technologies;
- Electromagnetic materials;
- Sensing and control of WPT systems;
- Practical design and productization of WPT systems.

---

### Collection Editors

Dr. Qi Zhu

Department of Electrical, Computer and Software Engineering,  
University of Auckland, Auckland, New Zealand

Prof. Dr. Aiguo Patrick Hu

Electrical and Computer Engineering, The University of Auckland,  
Auckland 1023, New Zealand

---



## Electronics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.6  
CiteScore 6.1



[mdpi.com/si/91597](https://mdpi.com/si/91597)

*Electronics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[electronics@mdpi.com](mailto:electronics@mdpi.com)

[mdpi.com/journal/  
electronics](https://mdpi.com/journal/electronics)





# Electronics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.6  
CiteScore 6.1



[mdpi.com/journal/  
electronics](https://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 guestedited 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).