

## Special Issue

# Secure Wearable Body Sensor Design for Massive Machine Type Communications

### Message from the Guest Editors

In recent years, the amount and magnitude of IoT and wearable device applications have expanded significantly, leading to the growing demand for a flexible body channel communication (BCC) system that can support both low-power operation and scalable data rates. Human body communication (HBC), which uses human body tissue as a transmission medium to transmit health informatics, serves as a promising physical layer solution for the body area network (BAN). The human-centric nature of HBC offers an innovative method to transfer healthcare data. This Special Issue is aimed at addressing issues that are involved in the analysis, design, and implementation of the HBC system and proposes efficient techniques that can reduce power consumption and increase the data rate in short-range communication systems. Topics of interest include the following:

- Body-channel communication (BCC);
- Capacitive coupling;
- Digital transmission;
- Electric field communication;
- Human-body communication (HBC);
- Intra-body communication (IBC);
- IoT;
- Low power consumption;
- Short range communication;
- Transmission path loss;
- Wearable computing;
- Wireless body area network (WBAN).

---

### Guest Editors

Dr. Rameez Asif

School of Engineering and Design, University of Sussex, Brighton BN1 9R, UK.

Dr. Mohammed Al-Sadoon

School of Engineering and Design, University of Sussex, Brighton BN1 9R, UK

---

### Deadline for manuscript submissions

closed (15 July 2025)



## Electronics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.6  
CiteScore 6.1



[mdpi.com/si/157967](https://mdpi.com/si/157967)

*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 16.4 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).