

Special Issue on “Antenna Design for Radio Frequency Identification (RFID) Systems”

In the last decades, the use of the RFID technology in industrial, logistics, and retail scenarios has been largely increased. This process has been clearly driven by the Internet-of-Things (IoT) paradigm where an increasing number of new applications rely on the opportunity offered by RFID technology to enable reliable communication at low cost and with lightweight apparatus. In fact, commercial devices, i.e., reader, tag, and reader antenna, are available on the market with accessible costs, and for this reason they are commonly employed. However, commercial-off-the-shelf (COTS) solutions cannot be used in some of emerging application scenarios which require customized reader and/or tag antenna design to better fit the specific requirements and optimize the whole system performance. This motivates researchers to propose new tag and reader antenna solutions based on different technologies, e.g., additive manufacturing, textile, or frequencies (HF, UHF, mm-wave), and optimized for various applications, e.g., wearable, on-metal, desktop and handheld readers, etc.

Original research papers, surveys and descriptions of successful case studies are encouraged on, but not limited to, the following relevant topics related to RFID tag chip-based systems:

- UHF RFID
- mm-Wave RFID
- HF RFID
- Flexible and conformal antennas
- Textile antennas
- Inkjet-printed antennas
- Antennas for green tags
- Additive manufactured antennas
- Metamaterial inspired antennas
- Desktop reader antennas
- Handheld reader antennas
- Electrically small antennas
- Wearable antennas
- On-metal tag
- Circular polarized antennas
- Dual-band antennas
- Near-field antennas
- AMC-based antennas

Important Dates:

- Submission Deadline: ~~November 30, 2023~~ **December 31, 2023**
- Tentative Publication Date (for the Editorial with the list of all accepted papers): **March 31, 2024**

As soon as the authors of the accepted papers submit the final files, their manuscript will be published on IEEE Explore as Early Access paper.

Guest Editors:

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Submission Guidelines: Authors are requested to electronically submit their original manuscripts through the IEEE Manuscript Central at <https://mc.manuscriptcentral.com/jrfid>, according to the format available at <https://journals.ieeeauthorcenter.ieee.org/>. While authors are submitting their manuscript they are required to select the present SI among the running ones, by selecting the following Type: "RFID ANTENNAS"

About the Journal: IEEE Journal of Radio Frequency Identification (JRFID) is the flagship journal of the IEEE Council on Radio Frequency Identification (CRFID). Since its establishment in 2017, JRFID (Hybrid Open Access) has been dedicated to disseminate cutting-edge research and fostering innovation in the domain of radio frequency identification.

JRFID has achieved remarkable success and outstanding metrics, solidifying its position as a leading publication in the field of the technologies for communication, localization, wireless power transfer and sensing. Here are some JRFID metrics:

- 2022 Journal Impact Factor: **3.1**
- Ranked in Q2 (150/349) in the ENGINEERING, ELECTRICAL & ELECTRONIC category
- Cite Score: **4.4**

JRFID has also excelled in publication timeliness (as from the IEEE PSPB report for Q1 2023):

- Average weeks from submission for review to first decision: **5.2 weeks**
- Average weeks from submission for review to publication in IEEE Xplore: **12.8 weeks**