

Special Issue

Applications of RFID in Robotics

Message from the Guest Editors

Radio Frequency Identification (RFID) technology is emerging as a powerful enabler in robotics, offering new opportunities for perception, localization, navigation, and interaction. Unlike conventional sensing methods such as cameras or LiDAR, RFID enables cost-effective, low-power, and robust sensing that works reliably in challenging environments such as low-light, cluttered, or occluded settings. The convergence of RFID with robotics opens new possibilities for developing intelligent, autonomous systems that are more adaptive, scalable, and resilient.

This Special Issue aims to bring together cutting-edge research exploring the integration of RFID with robotics and to showcase recent developments, challenges, and future trends in this interdisciplinary area. We welcome original research articles and reviews on, but not limited to, the following themes:

- RFID-based Sensing and Perception
- Localization, Mapping, and Tracking
- Robotic Manipulation and Mobility
- Human-Robot Interaction
- Industrial and Service Applications
- System Design and Algorithms
- Experimental Studies and Case Applications

We look forward to receiving your valuable contributions.

Guest Editors

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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

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