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Cagliari, Italy



## IEEE RFID-TA 2022 Workshop on Flexible and Printable Electronics and Electromagnetics (WFPE)

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Printable and flexible electronics implemented by digital and /or high-speed roll-to-roll capable manufacturing techniques such as ink-jet, screen- and 3D-printing, or laser scribing are emerging technologies, not just due to their cost-effectiveness and ever improving performance to cost ratio, but also due to their on-demand manufacturability and greener production possibilities. Beyond processing advantages, these technologies also offer new feature possibilities, such as the fabrication of the electronics directly on application specific substrates ranging from paper over textiles and biodegradable polymers to classical substrates for e.g. packaging or product integration purposes. This new flexibility in application design is especially important for all types of Internet of Things (IOT) applications, where wireless capabilities and RFID technology play a significant role.

Therefore, the focus of this workshop will range from additive manufacturing technologies to mechanically flexible electronic/electromagnetic applications. We are soliciting contributions with a focus on, but not limited to, the following topics:

### Topics Include

- Novel materials (organic, inorganic and hybrid) for manufacturing of electronics and electromagnetics
- Advanced fabrication technologies for antennas and their integration concepts in flexible electronic systems
- Transparent RF electronics and antennas
- Impact of mechanical antenna deformation on their electromagnetic performance.
- Additive manufacturing methods for electronics (from lab to large scale)
- 3D-Printing in Electromagnetics
- Flexible/conventional electronic integration

- Printed and flexible RFID technologies and their applications (active, passive, chip-less)
- Hybrid electronics & Internet of Things (IoT) concepts for Smart Sensing Devices
- Printable electronics and photonics
- Energy generation for wireless communication and wireless system integration
- Wearable electronic systems and smart skins
- Additively Manufactured RF systems and applications
- Space-based Additively Manufactured Electronics subsystems
- Thin film or flexible energy applications
- Energy storage elements (batteries, supercapacitors) and their integration in wireless systems
- Wide area processing of smart surfaces
- Flexible RF modules
- Flexible/Printable RFID inlays and antennas

## Submission Information

You may submit paper manuscripts for peer review to be included in this workshop through EDAS (<https://edas.info/>); please follow the paper guidelines and deadlines for the IEEE RFID-TA 2022 (<https://2022.ieee-rfid-ta.org/instructions-for-authors/>). For questions and contributions, please contact the workshop organizers:

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Check the IEEE RFID-TA 2022 conference website (<https://2022.ieee-rfid-ta.org/>) for announcements, conference program, and more. Participation and attendance in the Workshop are included for IEEE RFID-TA 2022 registrations.

*Brought to you by IEEE CRFID Technical Committee on Additively Manufactured Electronic Systems*