Latest Advances of 5G for IoT and Automotive Scenarios

Guest Editors:

Prof. Dr. Vincenzo Lottici
Department of Information Engineering, University of Pisa, 43 56126 Pisa, Italy

Prof. Dr. Sergio Saponara
Dipartimento di Ingegneria della Informazione (DII), Università di Pisa, via G. Caruso 16, 56122 Pisa, Italy

Dr. Alexandros-Apostolos Boulogeorgos
1. Digital Systems, University of Piraeus, Piraeus, Greece
2. Electrical and Computer Engineering, University of Western Macedonia, 5010 Kozani, Greece

Deadline for manuscript submissions:
closed (20 February 2022)

Message from the Guest Editors

The purpose of this Special Issue is to collect novel papers on the latest advances in 5G technology supporting next-generation IoT, smart manufacturing, and automotive communications, in order to provide a detailed understanding of the basic principles, state of the art, applications, future trends, and open issues. Hence, contributions from both academia and industry are invited on all the above 5G aspects concerning, but not limited to, topics such as:

- Transceiver and antenna design;
- Beamforming techniques, millimeter wave (mmW) communications combined with massive MIMO (mMIMO);
- Adaptive resource allocation;
- Cognitive, opportunistic, and cooperative radio;
- Latency, reliability, energy and spectrum efficiency, flexibility, connection density;
- Channel sounding, measurement, modeling, estimation;
- Reconfigurable intelligent surfaces;
- Network densification, optimization, planning;
- Cybersecurity issues;
- Machine learning techniques;
- Applications to automotive (V2X, ADAS) and smart manufacturing (D2D);
- High-performance platforms (FPGA, GPU, GPP, SoC) for baseband processing.

Special Issue

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.
Journal Rank: JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Contact Us