



Special Issue for

APSIPA Transactions on Signal and Information Processing

Topic of the special issue:

Advanced Signal Processing for 5G Wireless Communication Systems

Brief description:

A global market is launched for the fifth Generation (5G) wireless communication systems, promising to enhance mobile broadband, transmission reliability, and low-latency. To fulfill the requirement of 5G, plenty of works on advanced signal processing for ultra-high-speed data have been carried out in recent years, breaking through the conventional limitations. Researchers in both academia and industry have investigated potential solutions on long-haul high-capacity technologies for 5G systems. While 5G flexible access and diverse services have been widely explored, a number of challenges still lie ahead.

We would like to invite the authors whose contributions include the state-of-the-art works in theory, algorithms and applications of the advanced signal processing for 5G communication, with the goals to highlight new achievements and developments, promising new directions and extensions. Both survey papers and the papers of original contributions that enhance the existing works are highly encouraged.

Topics of interest include but are not limited to:

- Modulation strategy
- Coding and waveform
- Multi-carrier technology
- Multi-radio access
- Massive MIMO and smart antenna
- Centimeter/millimeter wave
- Learning-based signal processing
- Intelligent data mining
- SDN and NFV
- Sensor networks
- Radio over fiber and C-RAN
- 5G supported IoT
- Green communication
- Standardization
- Other services and applications

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