# Special Issue

# RF Front-End Circuit and Device for 5G/4G LTE

## Message from the Guest Editors

The continuous growth and adoption of smartphone access to voice and data services for billions of people worldwide and the explosive requirement for high data rates are driving the adoption of 4G/5G long-term evolution (LTE) and WiFi6. 5G will give higher data capacity and low latency using sub-6GHz bands and mmWave spectrum together with other RF technologies such as ultra-wideband (UWB) and sensing and computation techniques will enable multiple services. 4G/5G LTE basically requires more RF carries compared to the legacy voice (2G/3G), so there is an important challenge for RF front-end (RFFE) in terms of what parts of the RF systems are portioned in advanced CMOS nodes and what RF and analog blocks are integrated with other components such as acoustic duplexers and filters (FBAR, SAW, and BAW) in multiple modules (RF FEMs). This Special Issue of *Applied Sciences* will present an in-depth discussion of new devices and technologies for RF front-ends toward 4G/5G-LTE with WiFi6 that will have an impact on the electronics world in the next decade.

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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.

## Editor-in-Chief

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