



## Advanced Antenna Array Technologies and Applications

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### Message from the Guest Editors

Wireless communications are a fundamental component of modern society. Antenna arrays play an important role in this field, as they provide a vast set of advantages such as high directivity and adaptive beamforming to improve the wireless link. Antenna arrays are employed in several applications such as 5G, MIMO, GNSS for autonomous vehicles, wireless power transfer, radar, and satellite, aerospace, and mobile communications. Antenna arrays prove to be essential even for military and safety applications, through, for example, null-pointing operations to mitigate interferences, both accidental and intentional. With the increase of computational power of modern systems, complex algorithms which were unfeasible in the past become real possibilities to improve antenna array performances. This, in turn, can pave the way for sizeable advancements in this technology and its applications, using recent advances in the fields of, for example, artificial intelligence, RF circuits, additive manufacturing, and graphene.





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## Message from the Editor-in-Chief

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