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CMOS Power Amplifier Design and Applications

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Deadline for manuscript submissions: closed (30 November 2020)



Message from the Guest Editors

The design of CMOS power amplifiers continues to pose challenges in the design of wireless transceivers because of the low breakdown voltage in CMOS devices, the nosubstrate via-hole in the CMOS process, and the low quality of the passive components. In particular, a highly linear power amplifier is required because of the high peak-toaverage power ration and the wide bandwidth signal for 5G and next generation WLAN systems. Also, recent wireless communication standards require power amplifiers supporting dual or multi-bands. On the other hand, it is important to develop a tunable power amplifier that can minimize the efficiency degradation under impedance mismatch conditions.

Topics in this Special Issue include (but are not limited to):

- CMOS power amplifiers for 5G systems, LTE, WLAN, etc.
- CMOS power amplifiers with high power, high efficiency and/or high linearity
- Dual-band or multi-band CMOS power amplifiers
- Tunable CMOS power amplifiers
- Envelope tracking power amplifiers
- Doherty power amplifiers
- Outphasing power amplifiers
- Digital power amplifiers
- Transmitters with CMOS power amplifiers



mdpi.com/si/28885





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Message from the Editor-in-Chief

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