543
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Title:Silicon Based Millimeter Wave and THz ICs
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Abstract:In this paper, the research advances in silicon based millimeter wave and THz ICs in the State Key Laboratory of Millimeter Waves is reviewed, which consists of millimeter wave amplifiers, mixers, oscillators at Q, V and W and D band based on CMOS technology, and several research approaches of THz passive ICs including cavity and filter structures using SIW-like (Substrate Integrated Waveguide-like) guided wave structures based on CMOS and MEMs process. The design and performance of these components and devices are presented.
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