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Title:Single elements for low cost planar antenna arrays for consumer applications beyond 100 GHz

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Abstract:Single planar element designs working at frequencies around 122 GHz are presented. The structures are designed keeping in mind future commercial applications that might arise in mm-wave bands. Therefore, structures are explored with different radiation patterns. The antennas are implemented using commercial substrate and common photolithography to meet low cost requirements of consumer applications. Matching and radiation pattern was measured showing very good agreement simulations.

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