

Planar and cylindrical metamaterial structures for antenna applications

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Abstract

In situations where low-profile antennas in (principally but not exclusively) narrow band communications systems are needed, the use of resonant metamaterial structures is highly suitable. This is particularly useful for CP antennas where traditionally the BW is small. Cylindrical antennas are also shrinking in both length and radius by employing resonant metamaterials. This presentation will include a review of these concepts giving a few examples with measured data in the radio and microwave frequency range.