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قسم الفيزياء

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فۆرمى زانياريەكانى يلانى تويْژينەوەي مامۆستايان

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Comparative Design of the Rectangular Microstrip Patch Antenna Performance ناوی توێژینهوه: Operating at 5G with Different Feeding Techniques

رِيْكەوتى دەست پيْكردنى تويْژينەوە : 15/8/2022

ماوهی پێویست بوٚ تهواوکردنی توێژینهوه (5) چوار مانگ

كورتهيهك له يلانهكه:

A microstrip patch antenna is a planar directional antenna in which a metal patch is placed on top of a dielectric substrate with a bottom metal ground plane. The power transfer between a source and antenna is done through a feed line. In general, the characteristic impedance of a transmission line is 50 ohms, though in order to achieve a maximum power transfer, the patch antenna should be fed at a point where input impedance is matched to the feed line. There are several techniques available for feeding patch antenna to match this condition, inset feed, coaxial probe, electromagnetic coupling and proximity coupling methods.

In this paper, a comparative study between transamination line feed, inset feed, co-axial probe feed, for rectangular microstrip patch antenna is done for evaluating antenna parameters such as, S11 parameter, VSWR, directivity, beamwidth, gain and radiation pattern. The RMSPA is assumed to operate at **28** GHz and the design procedure for each feeding technique is performed and studied using both **CST** and **HFSS** simulation methods.

ناوی توێژهر/ توێژهرهکان واژوٚی

بهرواري ئهنجام داني سيمينارهكه

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