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Abstract
The novel designs of printed slot antennas for broadband characteristic have been investigated in this thesis. About this thesis, the designs of printed slot antennas all adopt the method of microstrip-line-fed, they can be classified into two main types of microstrip-line-fed isosceles triangular slot antenna and rectangular slot antenna, and impedance bandwidth of these proposed designs can achieved 77% and 104%, respectively. To begin with, the microstripline feed isosceles triangular slot antenna for broadband operation, the proposed antenna with a small rectangular slot of dimensions L×W, loaded on vertex of the isosceles triangular slot and centered above the microstrip feed line. Under the new structure, the proposed antenna leads to the advantages of broadband, high antenna gain and good co-polarization level. Next, to base on the broadband design of the isosceles triangular slot, we design a structure of rectangular slot antenna with a small trapezoid slot and to perform the purpose of broadband operation. Naturally, we focus on the characteristics of impedance matching, radiation patterns and antenna gain to analyze and study, too.

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