

Open Waveguide Based on Low Frequency Spoof Surface Plasmon Polaritons

吳家和, 林鴻兒, 楊宗哲, 高曜煌, 闕河立, 侯大鈞

Communication Engineering

Engineering

yhkao@chu.edu.tw

Abstract

theoretically and experimentally in this paper. Based on the guiding mechanism of spoof surface plasmon polaritons (spoof SPPs), the transmission properties of this waveguide are controllable by altering the geometric parameters of the periodic structure. Microwave experimental results verify the high efficiency of wave guiding in such open waveguide, as predicted in theoretic analysis.

Keyword : Metamaterials; Surface Plasmon Polaritons; Band Pass Filter; Waveguides