

## عنوان مقاله:

Small Monopole Antenna with Modified Slot Ground Plane for UWB Applications

## محل انتشار:

بیستمین کنفرانس مهندسی برق ایران (سال: 1391)

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## خلاصه مقاله:

A novel microstrip-fed monopole antenna with modified structure is presented for ultra wideband (UWB) applications. The main body of the antenna consists of a quasisquare radiating patch with tapered steps and a modified slotted ground plane. Due to the repeatedly cutting of three notches on the radiating patch and also inserting a rectangular slot and three tapered steps on the ground plane, new resonances and a wide bandwidth are obtained. By applying two sleeves with proper sizes to the antenna structure, even wider impedance bandwidth is achieved. The antenna has a compact size of  $18 \times 12 \times 1.6 \text{ mm}^3$  and covers the frequency range of 2.34 – 21.43 GHz (9.15:1; 160%).

The impedance bandwidth improvement process of the proposed antenna is presented and discussed in detail

## کلمات کلیدی:

UWB antenna, Microstrip feed line, wide impedance bandwidth

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/154271>

