عنوان مقاله:
Directional UWB Microstrip Antenna for Radar Applications

محل انتشار:
مجله Medbiotech, دوره 1, شماره 4 (سال: 1396)

تعداد صفحات اصل مقاله: 6

نویسندگان:
A. A. Kalteh - *Department of Electrical Engineering, Faculty of Engineering, Aliabad katoul branch, Islamic Azad University, Aliabad katoul, Iran*

S. Nikmeh - *Faculty of Electrical & Computer Engineering, University of Tabriz, Tabriz, Iran*

Atila Eskandarnejad - *Faculty of Electrical & Computer Engineering, University of Tabriz, Tabriz, Iran*

خلاصه مقاله:
The design and analysis of a directional microstrip ultra wideband antenna is presented. The proposed antenna consists of a circular ring exciting stub on the front side and a curved L-shaped ground plane. The curved L-shaped ground plane can simultaneously satisfy the requirement of impedance matching with 50-ohm transmission line and also give directivity. The proposed antenna is fabricated and measured. Measured results show that this antenna operates from 3 GHz to upper 9.35 GHz for voltage standing wave ratio less than 2. Moreover, the experimental results show that the proposed antenna exhibit low return loss, high directivity and flat gain in band of interest.

کلمات کلیدی:
Ultra-wideband Antennas, Microstrip Antenna, Radar Application