Review of: "Investigations on Input Impedance and Radiation Pattern of a UWB Antenna for Microwave Imaging"

Xin Ge Zhang

Potential competing interests: No potential competing interests to declare.

In this work, the authors presented investigations on the input impedance and radiation pattern of a UWB antenna. The results show that the proposed antenna exhibits good impedance bandwidth (S11 ≤ -10 dB) from about 4 GHz to 10.6 GHz. The corresponding simulated and measured radiation patterns are provided to verify the design. However, more data and discussions are needed to support their conclusions, and several issues should be illustrated further for better understanding of this work.

1. In the introduction section, the authors only listed some UWB antenna technologies and their applications and should provide some comparisons between these different technologies to make the background and motivation much clearer.
2. For the UWB antenna design, it should be better to present more detailed discussions on the relationship between the radiation pattern gain and the working bandwidth.
3. Although the simulated results have successfully verified the antenna performance, the authors are recommended to provide some discussions on its microwave imaging application.