

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

Farzad Khajeh-Khalili

Potential competing interests: No potential competing interests to declare.

Dear Dr. Gabriele Marinello

I am delighted to have been selected to review this manuscript. I hope I can continue to work with you. Also, I hope my effort will be accepted by you.

In this manuscript, the investigations on input impedance and radiation pattern of a UWB antenna for microwave imaging. Regarding this work, there are some concerns that the authors should consider and address:

- 1- The manuscript text should be reviewed for spelling, grammar, and writing.
- 2- The structure of the manuscript should be changed as follows:
 - The first formula (which should be numbered) should be removed from the introduction section, and if necessary, it should be included in the related designs section.
 - The visual results of other articles should be removed from the manuscript, and finally, in the form of a table, a summary of their performance, including parameters such as S-parameters, gain, polarization, dimensions, and applications, should be given.
 - Measured and simulated radiation patterns should be presented in the form of curves so that they can be compared. This is the case for other parameters as well (S-parameters and gain).
 - All charts and figures should have the same format. It is recommended that they be removed from the CST software form, completely drawn in MATLAB software, and added to the manuscript.
- 3- Add clearer pictures of the manufactured antenna in different views to the manuscript.
- 4- The measured results of gain should also be added.
- 5- E-field distribution, H-field distribution, and surface current distribution in the central frequency should be added to the manuscript.
- 6- Radiation efficiency should be added.
- 7- At the end, a complete table including parameters such as S-parameters, gain, polarization, dimensions (in terms of

mm3 and wavelength), and radiation efficiency should be prepared. The results of this work should be compared with those of other articles.