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

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Potential competing interests: No potential competing interests to declare.

Major Revision, Review Comments for improving the quality of the paper are as follows:

1. Abstract must include the following:

- Background
- Objective of proposed work
- Methods used to find the results
- Results
- Conclusion drawn from results

1. What is the designed frequency of the proposed antenna, and how did the authors select this specific frequency for its design? Please explain the mathematical approach behind the antenna's design.
2. Grammar portion, particularly the introduction portion, should be improved and written in a more objective-oriented approach.
3. State-of-the-art literature is a vital part of any research paper; the author is suggested to include the latest relevant papers along with the following papers in the revised manuscript.

- DOI: 10.1002/mmce.21894
- https://doi.org/10.1007/s11277-019-06968-w
- DOI: 10.1002/mmce.22488
- https://doi.org/10.1080/00207217.2022.211785
-
- 4. Include organization of the manuscript at the end of the Introduction section for enhancing the quality of the paper.
- 5. Also include pictures of the experimental setup for measuring the S-parameters and gain for the authenticity of the experimental results.
- 6. The reasons for the variations between simulated and experimental results must be reported in the manuscript.
- 7. Could you discuss the modes generated in the designed antenna?
- 8. The conclusion should include the following:
- Restate the Main Topic and Objectives
- Summarize Key Findings
- Interpret the Findings

- Address Limitations (if any)

- Provide Recommendations

- Concluding Remarks: End with a strong, concluding statement that reinforces the importance of your research and leaves a lasting impression on the reader.