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.

http://Part 1 The authors first presented some applications of UWB antennas in the [3.1-10.6] GHz band. To improve, I recommend giving the definition of a UWB antenna as defined by the FCC as well as the permitted power level. In the equation C =B·log2(1+ S/N), S/N is not correctly aligned with 1 (form) Part 2: state of the art The authors presented some works in the field of UWB antennas. They also presented the results of these works in the [3.1-10.6] GHz band ; which in itself is a good approach. Figure 1 relating to the work of [11] is a little confusing in terms of the proposed antenna. One might believe that this is the antenna proposed by the authors. The works of [9] and [15] were too detailed. What would be nice is to compare their results with their own results. Part 3: contribution The authors propose the same structure as [13] without any modification of shape or dimensions. Do they have the right? Maybe they wanted to make sure their simulations were correct. I think it still had to be modified before even adding the reflector which will only clutter the antenna. So, when we place a reflector to make the antenna unidirectional, the antenna must remain unidirectional even if we increase the surface area of the reflector. I think there is another phenomenon that made the antenna bidirectional, which is weird. On page 21, 4th line, correct “transmitted” by reflected and in the last line review the value of 25 dB which is a very large value. On page 18, align the equation giving the value of /4 (lambda/4) with the text. Other remarks: Number the equations More recent work has dealt with UWB antennas and may not have been consulted Put the list of references first before other references (37 before 36) In conclusion, I think the authors followed a good approach to writing an article. The results obtained are satisfactory for a start even if the initial structure is not their creation.