Dear Editor,

After carefully reading the authors' response letter and the revised manuscript, I won't suggest the publication of the manuscript on Sensors. The main reason is that the concept "Optical Bias" used in the authors' work is completely wrong, which might come from the authors' misunderstanding of "what's an optical bias for air-based THz detection?". In the authors' answer A4 to my question Q4, they use reference 14 as an example to rationalize the concept of "optical bias" of their work. However, the concept of "optical bias" used in reference 14 is substantially different from the author's work: in reference 14, the external second harmonic used as the "optical bias" is generated before the detection plasma, and therefore, the second harmonic does interact with the detection plasma. That's why the external second harmonic can act as an “optical bias”. Whereas, in the authors' work, the external (or say additional) second harmonic doesn't really interact with the detection plasma, and so their work doesn't really employ any optical bias. I am attaching Fig.1 reference 4 along with the setup figure in the author's manuscript so that you can directly compare the two works and find the substantial difference between them (Fig. 1 in reference 14 and Fig.1 in the author's manuscript). Besides, most of the other answers to my questions are very reluctant and didn’t really address most of the critical issues raised in the comments. For example, in answer A2 to question Q2, the authors didn’t give clear spectra by retaking data in the dry air or nitrogen gas, leaving very blurring spectra as presented in the original manuscript, and just tell us how to distinguishing their original data.Therefore, I suggest the rejection of the manuscript. Definitely, I would respect any decision made by you.Should you have any further question please do not hesitate to let me know.

Sincerely yours,

Reviewer of Sensors

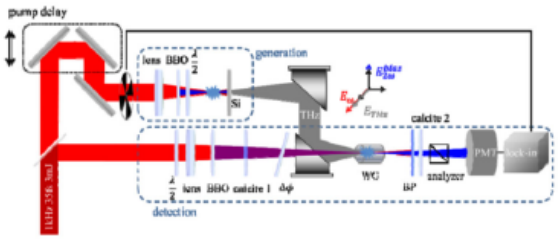

Figure 1 in Ref.14: In this work the external second harmonic really interacts with the detection plasma, and therefore, the second harmonic can act as “optical bias.

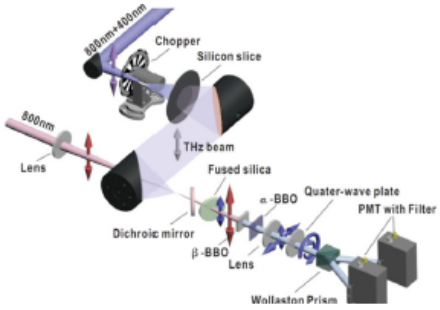

Figure 1 in the manuscript: The external second harmonic doesn’t actually interact with the detection plasma, and therefore, the second harmonic cannot be used as “optical bias.