

Review of: "Designing and modeling microwave photonic spectral filters based on optical microcombs"

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Potential competing interests: No potential competing interests to declare.

Authors design three kinds of microwave photonic filters based on an optical microcombs in this paper. Numerical investigations have been taken to check the performance of BPF, LPF and HPF, including three main parameters of resolution, roll-off rate and main-to-secondary sidelobe ratio. Meanwhile, investigations of distortions in the filter response induced by imperfect components are also conducted. The paper is well-organized and written. I recommend the acceptance for publication. Some minor questions in the following should be responded reasonably.

1. All the name of the authors should be given, since in the "We" have been mentioned many times in the main body.
2. In Table I on page 3, the authors have better include the performance of microwave filters. It is suggested to increase the performance comparison between the state of art of microwave filter and microwave photonic filter.
3. As the definition given, MSSR has a unit of "dB", please add the unit when discuss the performance like, on page 18 "MSSR is degraded from 13.26 to 6.96. For the BPFs, the ROR is almost unchanged, but the MSSR is decreased from 64.79 to 52.9", "MSSR for the LPFs is slightly degraded from 13.26 to 13.06" and on other pages.
4. Can an experimental example be added to prove the correctness of the design and analysis proposed in this paper?
5. There are too many references, please refine them.