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.

This manuscript presents a detailed analysis for the performance of microcomb-based microwave photonic (MWP) spectral filters achieved by employing a transversal filter approach. The affects of theoretical limitations due to finite tap numbers, imperfect response of experimental components and bandwidths of input microwave signals have also been determined.

Generally, the manuscript is well written and explains the basic concepts very well. I would like to suggest some recent literature regarding the demonstration of MWPs as follows:

1- Jawad Mirza, Ahmad Atieh, Abdulah J. Aljohani and Salman Ghafoor , "Design and Optimization of a Microwave Photonic Filter Exploiting Differential Mode Group Delay of a Multimode Fiber", *Optical Review*, Vol. 28 , No. 2, PP. 199-206, Apr, 2021.

2- Jawad Mirza; Benish Kanwal and Salman Ghafoor , "Microwave Photonic Notch Filter Based on Polarization Multiplexing and Cross Gain Modulation in a Semiconductor Optical Amplifier", *Electronics Letters: https://doi.org/10.1049/el.2019.3157*, Vol. 56 , No. 4, PP. 189-192, Nov, 2019.

3- Faizan Umar, Jawad Mirza, Salman Ghafoor , "Microwave Photonic Filtering Based on Optical Carrier Suppression Modulation", *Microwave and Optical Technology Letters*, Vol. 62 , No. 1, PP. 60-66, Sep, 2019.