

Review of: "Assessment of COVID-19 from Features Extraction of Exhaled Breath Using Signal Processing Methods"

Farook Sattar

Potential competing interests: No potential competing interests to declare.

The paper proposes a signal processing method for the detection of COVID-19 based on some discriminative features extracted from exhaled breath signals. The paper is interesting and needs some revisions as follows:

- 1. 'e2' should be defined in the Abstract.
- 2. Figures 2 and 3 are too small to read.
- 3. The overall presentation needs to improve. In particular, the discussions in Section 4 are not clear.
- 4. In Section 2.4 (Signal Preprocessing), the explanations of outlier removal and rectification are missing.
- 5. I think the epoch segmentation is an important step in the algorithm. Please include the basic concept of the proposed epoch segmentation approach. For example, if it is based on the ideas of 'change point detection,' then you may consider the AIC (Akaike Information Criterion) picker algorithm for epoch segmentation as well??
- 6. In the Introduction (e.g., last paragraph), please clearly mention the novelty/advantages of the proposed method.
- 7. In the Conclusion (Section 6), please add the limitations/constraints of the method as well as the future work.
- 8. It seems to me that you have only used the features extracted from the expiration phase of the breath signal. Please clarify it. Also, please explain how the breath signals are segmented into the expiration phase and inspiration phase.

Qeios ID: K89FIM · https://doi.org/10.32388/K89FIM