

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

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Potential competing interests: No potential competing interests to declare.

The technique divides the exhaled breath waveform into 5 segments where different features are computed from each segment. Is it possible to compute all the features from each segment and collect 5 sets of features for more accurate classification?

In the manuscript, there was a mention of a patient concern form. Is it supposed to be a consent form?

Two LPF filters are used to preprocess the signals. I am quite puzzled by the two-filter design. The first one is to limit the signal to a bandwidth of 10 Hz, but the second filter is to average the signal. Are two signals derived from the breath waveform, one is the low-passed signal limited to 10 Hz, and the second one is a broader low-passed version of the waveform? It seems a bit redundant to have two filters to produce similar outputs. More explanation is warranted on this part.

For machine learning, the term "epoch" is usually reserved for the cycle of the training of an algorithm, and the algorithm is tuned based on a loss function for each epoch, resulting in a better performing model at latter epochs. The use of epoch here seems unsuitable.