

Review of: "A combined generalized Warblet transform and second order synchroextracting transform for analyzing nonstationary signals of rotating machinery"

Ruo-Bin Sun

Potential competing interests: The author(s) declared that no potential competing interests exist.

The authors combine the generalized Warblet transform and the synchro-extracting transform to analyze the instantaneous frequency of nonstationary signals. Some flaws need to be solved before the paper is published.

- 1) Give a clearer explanation of why the two time-frequency analysis methods are combined. Whether combining any two parameterized time-frequency analysis and post-processing methods can achieve similar results?
- 2) In figure 4(e), the background noise seems to have the similar time-frequency distribution with the signal component. It is suggested to explain this phenomenon. Besides, how is the performance of the proposed method against noise interference?
- 3) In experimental validation part, a more detailed description of the original vibration signal and its spectrum is recommended. Moreover, an obvious mistake in the y-axis label of figure 10 and 11 can be found.

Qeios ID: QH7YVL · https://doi.org/10.32388/QH7YVL