

Comment on the paper "Analyzing the effect of dynamic properties of materials and operating medium on sensor parameters to increase the performance of diaphragmbased static/dynamic pressure sensors, Timuçin Emre Tabaru, Şekip Esat Hayber, Journal of Computational Electronics, 2021, 20:643–657"

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Abstract

Some errors exist in the above paper.

1 1st error

From Eq. (4) in [1] it is found that the units of d_c are $msec^{-2}$ whereas the units of the same parameter in Eq. (9) in [1] and in Nomenclature are m(length).

2 2nd error

The Eq. (13) in [1] is as follows

 $T_f = 0.0102\rho r d_c \tag{1}$

where T_f is the kinetic energy of the fluid (Nomenclature). From Eq. (1) it is found that the units of T_f are Kgm^{-1} . However kinetic energy with these units does not exist in Physics.

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3 3rd error

In Eqs. (1) and (4) in [1] the parameter t represents time and in Eq. (12) in [1] and in Nomenclature t is thickness (length).

4 4th error

In Eq. (1) in [1] the units of the term $2\xi \frac{\partial w}{\partial t}$ are $m \text{sec}^{-1}$ instead of $kgm^{-1}sec^{-2}$.

5 5th error

In figures appears an unknown dimensionless parameter dr.

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Declarations

Conflict of interest The authors declare that there is not conflict of interest.

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References

1. Tabaru, T.E., Hayber, Å.E.: Analyzing the effect of dynamic properties of materials and operating medium on sensor parameters to increase the performance of diaphragmbased static/dynamic pressure sensors. J. Comput. Electron. **20**, 643–657 (2021)

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