Review of: "Tsallis Entropy applied to microfluidic channels analysis"

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Potential competing interests: No potential competing interests to declare.

In this paper, Tsallis entropy is used to describe the fluid flow in microchannels from the perspective of thermodynamics. Overall, this paper is somewhat innovative, but it still needs some improvement. Here are some of my comments on the article.

1. Please highlight the innovation of this paper in the abstract and conclusion. In particular, the characteristics and advantages of Tsallis entropy in describing fluid flow in microchannels are highlighted.

2. There are too few references, resulting in an incomplete description of Tsallis entropy in the paper. Problems in the field of fluid flow analysis in microchannels also need to be explained in detail.

3. The physical explanation followed by the mathematical formula is insufficient, especially formula (12). Please explain in detail how formula (12) was obtained and add a detailed physical explanation.

4. Please enrich the results analysis section, especially for the analysis in Figure 3.

5. Please give ranges for specific parameters. If possible, please add some experiments to support your conclusions.

6. This paper needs a comprehensive writing examination, especially grammar, sentence structure, spelling.