

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

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**Potential competing interests:** No potential competing interests to declare.

The manuscript presents a clear and relevant research objective to apply Tsallis entropy to the analysis of fluid flow in microfluidic channels. The study's focus on microfluidics and the utilization of Tsallis entropy, a non-extensive statistical measure, underscores the novelty and potential significance of the research for advancing the understanding of microscale fluid dynamics.

The integration of non-extensive statistical mechanics into microfluidic analysis is well-justified and demonstrates a deep understanding of both domains. The methodology section outlines the steps taken for data collection, analysis, and interpretation, ensuring transparency and reproducibility.

The manuscript effectively presents the results of the Tsallis entropy analysis, revealing insights into the fluid dynamics within microfluidic channels. The discussion of the findings is appropriately framed within the context of existing literature on microfluidics and entropy-based analyses, showcasing the manuscript's contribution to the field.

The manuscript acknowledges the potential implications of the study's findings for microfluidic device design, fluid manipulation, and biomedical applications. The authors effectively communicate the practical significance of their research, opening avenues for further exploration and application.