

[Review Form2](#)

Book Name:	<a href="#">Current Research Progress in Physical Science</a>
Manuscript Number:	Ms_BPR_2679
Title of the Manuscript:	Impact of a thermally stratified energy source on a high-speed flow/flight
Type of the Article	Book chapter

**PART 1: Review Comments**

<b>Compulsory</b> REVISION comments	<b>Reviewer's comment</b>	<b>Author's Feedback</b> (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</b>	This manuscript makes a significant contribution to the aerospace engineering field by investigating the effect of a thermally stratified energy source on supersonic flow. It provides new insights into the generation of Richtmyer-Meshkov instabilities, which disrupt the bow shock wave, thus impacting the aerodynamic characteristics of high-speed flight. The numerical simulations and findings are highly relevant for improving flow control mechanisms in high-speed aerospace applications.	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	The title "Impact of a thermally stratified energy source on a high-speed flow/flight" is appropriate, as it succinctly conveys the core subject matter of the manuscript.	
<b>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</b>	The abstract is comprehensive, providing an overview of the methodology and key findings. However, it could benefit from a clearer explanation of the implications of the multi-vortex mechanism and the practical applications of the temperature reduction at the vertex of the double-wedge. Adding a concluding sentence that highlights the broader significance of these findings would strengthen the abstract.	
<b>Are subsections and structure of the manuscript appropriate?</b>	The subsections and structure of the manuscript are well-organized, with a logical progression from the introduction to the methodology, results, and conclusions. This structure effectively supports the communication of complex information.	
<b>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</b>	The manuscript appears scientifically robust and technically sound. The numerical methods used, such as the solution of the Navier-Stokes equations and the modeling of the stratified energy source, are well-established and appropriate for the problem at hand. The results are supported by detailed calculations, and the comparison between stratified and homogeneous energy sources provides a clear validation of the findings.	
<b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b>	The references are sufficient and mostly recent, with citations to foundational works and relevant studies. However, more recent studies on the application of Richtmyer-Meshkov instabilities in modern aerospace technologies could further enhance the manuscript.	

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Minor REVISION comments <b>Is the language/English quality of the article suitable for scholarly communications?</b>	The language and English quality of the article are generally suitable for scholarly communication. However, minor grammatical improvements and refinements in sentence structure could enhance readability.	
<b>Optional/General</b> comments		

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

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