

Review Form 3

Journal Name:	Journal of Engineering Research and Reports
Manuscript Number:	Ms_JERR_123713
Title of the Manuscript:	Design and study of wave flow field bipolar plates for proton exchange membrane fuel cells
Type of the Article	Minireview Article

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>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.</p>	<p>One of the key ideas of wave flow in channels is the design and study of wave flow field bipolar plates for proton exchange membrane fuel cells. Conventional flow field designs, including serpentine or parallel channels, can result in problems like increased pressure drop, non-uniform gas distribution, and reduced gas flow rates. These problems are solved by the wave flow field design, which produces a more intricate, wavy pattern on the bipolar plate's surface. An essential component of bipolar plate design for PEM fuel cells is the wave flow field design. The surface of the plate can be patterned in a more intricate, wavy way by designers to increase gas dispersion, lower pressure drops, and increase gas flow rates. As researchers continue to optimize wave flow field designs, we can expect to see improvements in PEM fuel cell performance and efficiency.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>Minor correction in the title can be done like "Design and study of wave flow field in bipolar plates for proton exchange membrane fuel cells"</p>	
<p>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.</p>	<p>The Author has mentioned in the Abstract that the paper analyzes the advantages and disadvantages of other flow channels, and uses computational fluid dynamics (CFD) simulation to evaluate the influence of wave flow field design on the internal fluid dynamics of the fuel cell. This can be deleted since this paper summarizes the research on flow field design by researchers in related fields at home and abroad,</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>Yes, they are appropriate.</p>	
<p>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.</p>	<p>These resources provide in-depth information on wave flow field design principles, numerical simulations, and optimization techniques for PEM fuel cells. wave flow field design is a crucial aspect of bipolar plate design for PEM fuel cells. By creating a more complex, wavy pattern on the surface of the plate, designers can improve gas flow rates, reduce pressure drops, and enhance gas distribution. As researchers continue to optimize wave flow field designs, we can expect to see improvements in PEM fuel cell performance and efficiency. If any of the researcher wants to study Proton exchange membrane fuel cell (PEMFC) they can review this article and carryout further research.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>There are enough references given in this article. But the Author name and the contribution of the Authors like References [2],[17],[18] mismatches with the content given.It has to be corrected</p>	
<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The quality of language is suitable for scholarly communication.</p>	
<p>Optional/General comments</p>	<p>The Author can contribute by taking Numerical data in flow field and can do Numerical simulation which will help the scientific community.</p>	

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PART 2:

	Reviewer's comment	Author's comment <i>(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)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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