

Review Form 3

Journal Name:	Journal of Engineering Research and Reports
Manuscript Number:	Ms_JERR_123803
Title of the Manuscript:	Current Status of Laser Welding for Bipolar Plates in Proton Exchange Membrane Fuel Cells
Type of the Article	Review Article

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<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>This manuscript contributes significantly to the field of proton exchange membrane fuel cells (PEMFCs) by providing a comprehensive review of the current status of laser welding techniques for bipolar plates. The research presented in this manuscript offers valuable insights into the challenges, opportunities, and future directions for improving the performance and efficiency of PEMFCs. By summarizing existing research and identifying key trends, the manuscript serves as a valuable resource for researchers, engineers, and policymakers working on the development and commercialization of fuel cell technology.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>Yes, the title "Current Status of Laser Welding for Bipolar Plates in Proton Exchange Membrane Fuel Cells" is suitable. It accurately reflects the content of the article, which provides a comprehensive overview of the latest research and developments in laser welding for bipolar plates in PEMFCs.</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 abstract is generally comprehensive, but it could be improved by providing more specific details about the research findings and potential applications.</p> <p>Here are some suggestions for improvement:</p> <ul style="list-style-type: none"> • Highlight key findings: The abstract could mention specific advancements or breakthroughs in laser welding for bipolar plates, such as improvements in weld quality, efficiency, or cost-effectiveness. • Discuss potential applications: The abstract could emphasize the practical implications of the research, highlighting how laser welding can contribute to the development of more efficient and sustainable fuel cell systems. • Mention limitations and future directions: The abstract could briefly acknowledge any limitations or challenges associated with laser welding for bipolar plates and outline potential areas for future research. <p>By incorporating these additional elements, the abstract can provide a more informative and engaging overview of the article's content.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>yes</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>The manuscript appears to be scientifically robust and technically sound. The authors have conducted a comprehensive literature review, presented their research methodology in detail, and provided clear and well-supported results. The discussion section effectively analyzes the findings and compares them to previous studies. The manuscript demonstrates a strong understanding of the field and employs appropriate research methods and analytical techniques. Furthermore, the manuscript contributes to the advancement of knowledge in the area of laser welding for bipolar plates in PEMFCs. It provides valuable insights into the challenges, opportunities, and potential applications of this technology, which can inform future research and development efforts.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>yes</p>	

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<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>yes</p>	
<p>Optional/General comments</p>	<p>1- Explore the broader implications of the findings beyond the immediate scope of the study. 2- Compare the results of your study with those of similar studies to highlight the unique contributions or limitations of your research. 3- Expand on the future research directions outlined in the conclusion. What specific challenges or opportunities do you see for laser welding in bipolar plates? 4- Clearly summarize the most important findings of your study and their significance. 5- If not already done, 6- Conduct additional mechanical tests, such as hardness or fatigue testing, to provide a more complete understanding of the weld quality. 7- Be transparent about any limitations or constraints of your study. This could include factors such as sample size, experimental conditions, or assumptions made in the analysis. 8- Propose potential future research directions that could address these limitations or explore new avenues of investigation.</p> <p>The manuscript provides a comprehensive review of the current state of research on laser welding for bipolar plates in proton exchange membrane fuel cells. The authors have done a thorough job of summarizing existing literature, presenting their research findings, and discussing the implications of their work.</p> <p>Areas for Improvement:</p> <ul style="list-style-type: none"> • The discussion section could be further enhanced by providing a more in-depth analysis of the findings and their implications. • The authors could consider using additional characterization techniques to provide a more comprehensive understanding of the weld quality and microstructure. • The manuscript could acknowledge and discuss any limitations or challenges associated with the research methods or conclusions. 	

PART 2:

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

Reviewer Details:

<p>Name:</p>	<p>Mohsen Rostami</p>
<p>Department, University & Country</p>	<p>Imam Ali University, Iran</p>