

Review Form 3

Journal Name:	Physical Science International Journal
Manuscript Number:	Ms_PSIJ_123498
Title of the Manuscript:	Solid-State Battery Technology For Grid Stability and Energy Storage Applications
Type of the Article	Review Article

Review Form 3

PART 1: Review Comments

<u>Compulsory</u> 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>Effective solid-state batteries (SSBs) were highlighted in this review paper as a new and promising replacement for traditional lithium-ion batteries. And how solid-state batteries behave as well as the special qualities of SSBs, such as their solid state electrolytes (SSEs). encompassing cost-cutting measures, manufacturing procedures, and material selection. It would be preferable, though, if the following queries could be answered prior to publishing.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>I think change title "Solid-State Batteries: Overcoming Challenges and Harnessing Opportunities for a Sustainable Energy Future"</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>Yes, this abstract provides a solid overview of the potential benefits and key challenges of solid-state batteries (SSBs). However, to ensure it is comprehensive and clear, you might consider the following points:</p> <ul style="list-style-type: none"> Here are some suggestions for refining your abstract to ensure it is comprehensive and effectively communicates the key aspects of your paper: Addition: Include a brief definition or description of solid-state batteries to provide context. For example, you might add, "Solid-state batteries (SSBs) use a solid electrolyte instead of the liquid or gel electrolytes found in conventional lithium-ion batteries." Specify key metrics or comparisons, such as "SSBs can achieve energy densities of up to [X] Wh/kg, compared to [Y] Wh/kg for conventional lithium-ion batteries." This provides concrete evidence of the benefits. 	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>it seems like your manuscript covers several critical areas of solid-state batteries (SSBs). Here's a suggested structure and subsections that might help organize your content effectively:</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 demonstrates scientific robustness and technical soundness through its comprehensive examination of solid-state batteries (SSBs) and their potential advantages over conventional lithium-ion technologies. It meticulously details the unique characteristics of solid-state electrolytes (SSEs), including their role in enhancing safety and energy density, and addresses the critical challenges associated with material selection, manufacturing, and cost reduction. The inclusion of recent advancements and ongoing research highlights a thorough understanding of the current state of SSB technology and its future directions. By systematically analyzing both the benefits and limitations of SSBs, the manuscript provides a balanced and in-depth perspective, ensuring its relevance and credibility in the field of energy storage 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>ensure that the references are up-to-date, cover the breadth of the topic, and include both foundational and cutting-edge research. Incorporating recent high-impact publications and comprehensive reviews will strengthen the manuscript's credibility and relevance in the field.</p>	
<p><u>Minor</u> REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>formal language is essential for effectively conveying research findings and engaging with the academic community. improve it</p>	
<p><u>Optional/General</u> comments</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>	

Reviewer Details:

Name:	N. Ramaiah
Department, University & Country	SVR Engineering College, India